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REPORT
ON THE
Health of the Urban District

OF
Swinton and Pendlebury

FOR THE YEAR 1913,

TOGETHER WITH THE
Report on Medical Inspection of School Children

BY
W. STEWART STALKER,

M.D. (GLASGOW), D.P.H. (OXFORD),

MEDICAL OFFICER OF HEALTH

AND

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Staff of Public Health Department.

Medical Officer of Health :

W. STEWART STALKER, M.D. (Glasgow), D.P.H. (Oxford).

Inspector of Nuisances :

ALBERT BLEAKLEY.

Assistant Sanitary Inspectors :

PERCY BERRY (Certificate, R.S.I.)

LEONARD M. MARSHALL (Certificate, R.S.I.)

Lady Health Visitor :

MRS. JOHNSON (Certificate, R.S.I.)

School Nurse :

ELIZABETH WALKER (C.M.B.)



To the Chairman and Members of the
Swinton and Pendlebury Urban District Council.

Mr. Chairman and Gentlemen,

I beg to submit to you my first annual report as Medical Officer of Health for Swinton and Pendlebury. Bound within the same cover is the report of the School Medical Officer.

The work entailed in the compilation of this report has been by no means inconsiderable. Populations for the last twenty years have been re-estimated and vital statistics have required revision, in order that birth-rates and death-rates and infectious disease rates might be more accurately charted.

My duty commenced on April 21st, 1913. I found at the outset that I was faced with considerable work of re-organisation. In accomplishing the re-organisation I was greatly handicapped by lack of clerical assistance. I have been without clerical assistance, except such as I have got from the recently-appointed assistant Sanitary Inspector, for the 10 months during which I have been your Medical Officer and I can only say that it appears an unsound economic principle to pay a Medical Officer of Health and a Sanitary Inspector to do a clerk's work.

I believe it was thought at the time of my appointment that I would have little to do. I can unaffectedly say that working assiduously as a whole time officer, although paid a part time officer's salary, I feel that there has been much work left unaccomplished. I am aware that my office nominally ranks as a part time office, on account of my being Factory Certifying Surgeon and receiving an average income of £50 a year from that appointment, but the four hours a week, at most, I give to factory work are more than compensated for by the evening work I accomplish both at home and in the office and by the value to the School work I bring with my factory association.

The most of this report was written, after the routine day's work, lasting often until 5-30 p.m., was accomplished.

I am glad to say that the work has been characterised by no regretful incident. All has been pacific.

My relations with the Medical Practitioners of the district, to whom I am indebted for much valuable information, have been most friendly.

I wish to thank members of the Council for the spirit of tolerance and acquiescence they have shown towards the many proposals and innovations I have had to make. I hope they may be able to realize from the following pages what has been done and what should be done.

To Mr. Postlethwaite, Clerk to the Council, I am deeply indebted for much kindness and the support of mature judgment at all times. The Surveyor, Mr. Entwisle, and other officials have been most helpful to me. Mr. Bleakley, Inspector of Nuisances, Mr. Berry and Mr. Marshall, Assistant Sanitary Inspectors, and Mrs. Johnson, Lady Health Visitor, have given the Council loyal and devoted service.

I am,

Mr. Chairman and Gentlemen,

Your humble servant,

W. STEWART STALKER.



STATISTICAL SUMMARY FOR 1913.

Area in Acres	...	...	...	...	...	2,292
Population at Census of 1911	...	...	...	...	...	30,759
Estimated Population in July, 1913	...	...	...	...	...	31,975
Population per Acre	...	...	...	...	...	13.9
Number of Houses in the District on December 31st, 1913	...	...	...	...	...	6,678
Number of Persons in each inhabited house (at Census of 1911)	...	...	...	...	...	4.68
Number of Births during 1913	...	...	...	...	...	758
Birth-rate per 1,000 of the Population	...	...	...	...	...	23.7
Number of Deaths	...	...	...	...	...	479
Death-rate per 1,000 of the Population	...	...	...	...	...	14.9
Natural Increase of the Population during the year	...	...	...	...	...	274
Number of Deaths of Infants (under the age of one year).	...	...	...	...	...	108
Infantile Mortality per 1,000 Births	...	...	...	...	...	142.4
Number of Uncertified Deaths	...	...	...	...	...	4
Death-rate from the seven principal Zymotic Diseases per 1,000 of the population	...	...	...	...	...	1.9
Death-rate from Diarrhœa and Enteritis, of Children under two, per 1,000 births	...	...	...	...	...	31.6
Death-rate from Phthisis per 1,000 of the Population	...	...	...	...	...	0.9
Death-rate from all forms of Tuberculosis per 1,000 of the population	...	...	...	...	...	1.7
The Rateable Value of the District was	...	...	...	...	...	£119,971
Produce of a Penny Rate	...	...	...	...	...	£429

I. The Urban District.

The Urban District of Swinton and Pendlebury lies W.N.W. of Manchester, from which it is separated by the County Borough of Salford.

The Local Government District was constituted by an order dated the 25th day of January, 1867, and was formed by the Union of the civil parish of Pendlebury with the hamlets or places known as Swinton, Little Houghton, and the Lower Division of Worsley.

The petition praying for a definition of the boundaries of a local government district was the direct result of the last of the great cholera epidemics.

The total acreage of the district is 2,292, but of this total only 851 acres are built upon. The remaining 1,441 acres of unbuilt land are in part laid out in public parks and recreation grounds. The acreage of public parks and recreation grounds is as follows :—

Victoria Park...	...	...	...	12 acres
Moorside Park	...	...	...	9½ „
Newtown Recreation Ground	...	...	...	2¼ „
Public Gardens, Chorley Road	...	...	...	⅓ „

The highest point of the district is 286 feet above sea level, and the lowest is 99 feet above sea level.

The geological features of the district are, shortly, as follows :—The Urban District is on the Coal Measures, which, however, are overlaid by a considerable amount of Drift, chiefly in the form of Glacial Sand and Gravel, and of River Valley Gravel. The soil on which the greater part of the housing is situated is dry sand of uncertain depth.

The district is divided into six wards.



The following institutions are within the district boundaries :
—Poor Law Schools of the Manchester Guardians ; Manchester Children's Hospital ; Swinton House and Parkfield, Manchester Education Committee Cripple Schools.

POPULATION AND OCCUPATION.

The Registrar General's estimation of the population for the district at the middle of last year was 31,658.

A census of inhabited houses was taken in May, and an estimation of population was made by multiplying the number of inhabited houses by the factor 4.68, this being the average number of persons per private family at the 1911 census. To the total was added that institutional population which for census purposes is reckoned as belonging to this area. The figure arrived at was 31,975. I am inclined to regard the latter figure as more accurate than the former, little as the difference is. The actual number of inhabited houses in the estimation was an incontrovertible figure. Accordingly, in calculating birth, death and sickness rates, the figure 31,975 has been that used.

The density of population for the whole district is 13.9 persons per acre. The density per acre in that part of the district which is built upon is 37.5.

Socially, the population is in the main industrial.

The following statement gives for each ward the total acreage, built and unbuilt, with the number of houses per acre and the density of population in the built acreage :—

Ward.	Total Acres.	Unbuilt Acres.	Built Acres.	No. of Houses.	Houses per Acre.	Density of Population per built Acre
East	740	464	275	1012	3.7	17.4
Market	130	73	57	1033	15.9	83.8
Newtown ...	260	168	92	1230	13.4	62.5
Moorside ...	430	288	142	910	7.1	29.9
Old Park ...	610	396	214	1149	6.0	29.04
Vic. Park ...	122	52	70	1301	16.2	86.8

The census occupation returns deal with urban populations less than 50,000 in the aggregate only, so that it is impossible to give definite figures as to the proportion of population engaged in one or other industry, but it may at once be said that but a small number of employed persons seek occupations outside the cotton, mining, and to a lesser extent engineering industries. Between April 21st and December 31st, last year, some 750 children and young persons were presented for certification by the factory surgeon for this and Worsley districts. The figure for the earlier part of the year is not available, but in proportion to that given above would bring the total for the year to roughly 1,000 persons. The number of girls presented was nearly double that of boys presented, and at least 90 per cent. of the total number examined were presented at spinning or weaving mills. The excess of girls over boys is accounted for by the demand of the mines for male labour. The figures will serve to show how the younger population tends to employ itself.

No particular occupation in the district would appear to have measurable detrimental effect on the public health.

Respiratory disease has always figured as a prominent cause of death in this area, and it will not be denied that conditions conducive to the development of the acute respiratory affections are to be found in the differences of temperature and atmosphere which the spinning mill employé must necessarily be subjected to. Chronic respiratory disease is at all times associated with mining operations.

The rate of mortality in respiratory affections, however, is often dependent on the extent to which Bronchitis and Broncho Pneumonia in children have been prevalent as results of Measles and Whooping Cough Epidemics.

I have been struck by the abundant evidence there is in adults of Rachitic Deformity and Deafness.

POOR LAW RELIEF.

Two Poor Law Unions are represented in this Sanitary area *i.e.*, Salford and Barton-upon-Irwell.

The Clerk to the Salford Guardians has kindly given me the subjoined information with respect to Poor Law relief in the Salford Union portion of this district.

Total amount of Out-Relief	...	£245 11s. 8d.		
		Men	Women	Children
Number of persons in receipt of Out-Relief...	27	37	68	
Number of cases admitted to Workhouse	...	26	...	
Number of cases admitted to Union				
	Infirmery...	...	28	...

The Barton-upon-Irwell Guardians, through their Clerk, informed me that they thought that it was undesirable that the publication of Poor Law figures should take the form I suggested. I am therefore unable to give any information with regard to the amount and extent of Poor Law relief in the Barton-upon-Irwell Union portion of this area.

II. Vital Statistics.

BIRTHS.

The birth-rate for 1913 was 23·7. For each Ward it was as follows :—

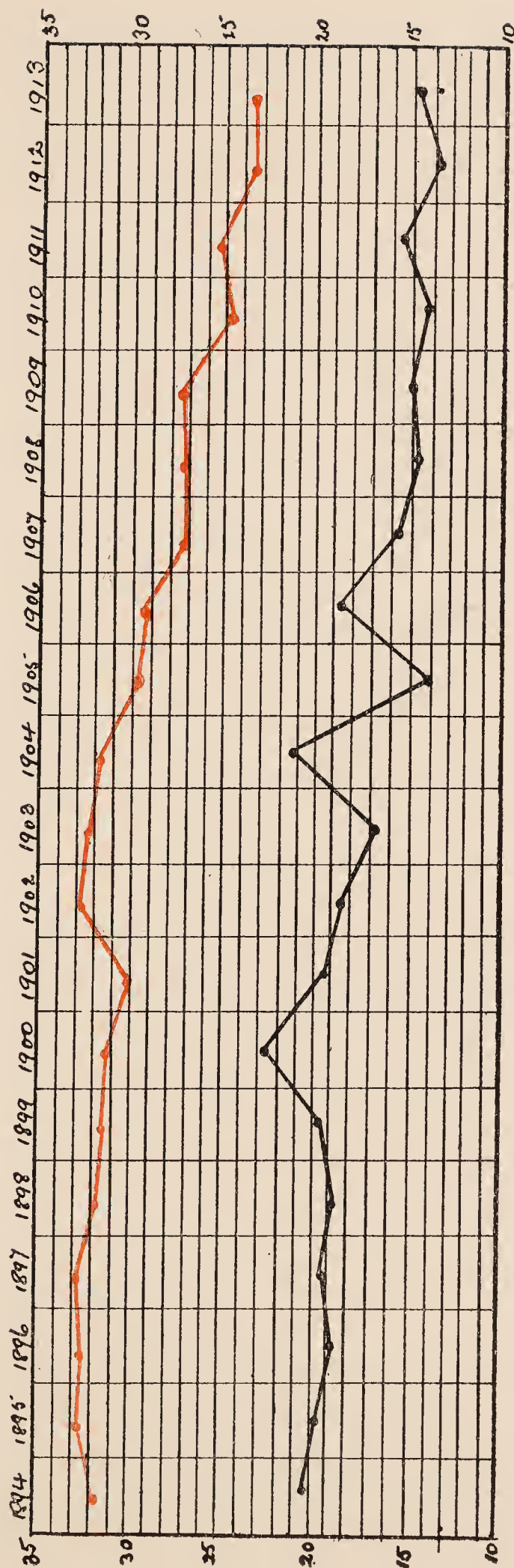
Victoria Park	...	...	20·7
Old Park	...	...	20·2
Moorside	...	...	19·7
Newtown	...	...	19·6
Market	...	..	33·2
East	...	...	34·5

It will be seen that the general rate shows no improvement on the figure for 1912. Reference to Chart I. will establish the fact that for 10 years the birth-rate has steadily declined, while there has been no commensurate fall of the death-rate. The result, of course, has been that natural increase of population each succeeding year has diminished, and further reference to the chart will show that the interval between the birth and death curves tends to get less.

It has been contended that the declining birth-rate is nature's action in maintaining balance, and that there need be no alarm occasioned by the lowering birth figure. This argument would be acceptable if the death-rate were to exhibit proportionate diminution, but it has not done so, and if the rate of birth decreases with the same rapidity during subsequent years as it has done in the last ten years, and the death-rate retains the same constancy, it will require but a century to bring the birth and death-rates to the same figure. At the same time the lowered birth-rate is raising the average age of the existing population, from which contingency one might expect an increased death-rate in a few years, so that the approximation of the curves would be further hastened.

CHART I.

BIRTH AND DEATH RATES, PER 1000 POPULATION FOR THE LAST 20 YEARS.
 Births (red).
 Deaths (black).



The rise in the death-rate in 1900 was due to an epidemic of Measles, and a considerable fatality from Respiratory affections. The rise was independent of infant mortality.

The rises in the death-rates in 1904 and in 1906 were dependent on infant mortality, the chief cause of infant deaths in each year being Enteritis.

It is not for me to theorise as to the causes of the declining birth-rate. The fall is not confined to this district. It is general throughout England and Wales. Such information, however, as may be derived from the study of figures may be stated.

It will be seen at once that there is a marked disparity in the rate in certain Wards. Thus Victoria Park, Old Park, Moorside and Newtown Wards have low birth-rates, while Market and East Wards have relatively high rates. What is the inference to be drawn therefrom? It can only be that conditions which operate to keep down the birth-rate in the former Wards are not active, or are much less active, in the latter Wards? What are the main conditions likely to occasion diminishing birth-rate? They probably are, increase in the average age at marriage and realisation of responsibilities, the latter expression being used in a comprehensive sense. I think it may be said without fear of contradiction that the average age is "younger" in East and Market Wards, and that the realisation of responsibilities is less there.

The young population is the State's greatest asset, and every credit is due to communities which multiply in undiminished numbers. It is regrettable, however—if regret may be associated with fertility—that the undecreased multiplication is confined to less vigorous classes, in which the expectation of life is curtailed by social and economic conditions and hereditary proclivities.

The State has made one decided movement in the recognition of its asset—the infant—by the provision of maternity benefit. Greater help is called for. Something more worthy of the honourable and desirable product of marriage is due to the low-waged working classes with large families than that which they have sometimes to solicit, *i.e.*, supplementation of the Poor Law, or charity.

DEATHS.

The general death-rate for the district last year was 14·9.* This is exactly 1 per 1000 higher than in 1912, when the death-rate was 13·9. The difference is mainly due to increased infant mortality. The rate for each Ward was as follows :—

Victoria Park	...	...	16·1
Old Park	...	...	9·6
Moorside	...	...	11·2
Market	..	...	21·9
Newtown	...	...	14·2
East	...	...	17·7

By the method of multiplying the number of houses by the factor 4·68, populations were estimated for sections of Wards where the death-rate appeared to be high. Thus for the area embraced in Knowles Square and “The Croft” the death-rate, based on the population estimated by the above method, was 38, and in Albion Street area it was 37. I do not wish to create any false impression by claiming indisputable accuracy for the estimated populations of the respective areas. It is in those areas that overcrowding might be expected to occur, and the populations would therefore be under-estimated and the death-rate over-estimated, but the calculations prove that in those areas factors are at work which produce death-rates which are much higher than either the district rate or the Ward rate. The infant mortality rate in each area was 310 in Knowles Square and “The Croft,” and 250 in Albion Street area.

It will be realised that the death-rate of any district may give but a vague impression of how great is the toll of human life in certain sections of the district.

In chart I. is given the general death-rate of the district for the last 20 years. It will be seen that the rate has fallen from, roughly, 20 to 15 during the period charted, but that during the last few years the rate has remained constant. It goes without

* Corrected for age and sex distribution the death rate becomes 16·8,

CHART II.



saying that the lowered death-rate was the direct result of sanitary improvements in which conversions, yard paving, street paving, and more effective control of nuisances, figured prominently. There naturally came a time when the worst features exemplified in conservancy, and yard and street conditions, had disappeared. Then the death-rate became more constant and the gradual decline was no longer in evidence. The death-rate is by no means satisfactory now and the influences at work in the unsatisfactory rate production must be sought for. It can be said emphatically that the conservancy system remaining as it does in such substantial form, exerts an influence which is opposed to low death-rates. This influence is at work wherever high mortality rates from infant diarrhœa obtain. Other influences, however, are obviously at work and demand the attention of the Authority. I have given rates where the housing is very unsatisfactory and these mortality rates speak more eloquently and more convincingly than I can, on the evil of bad housing. The problem of housing reform is as urgent as were the problems of pure water supply and sewerage.

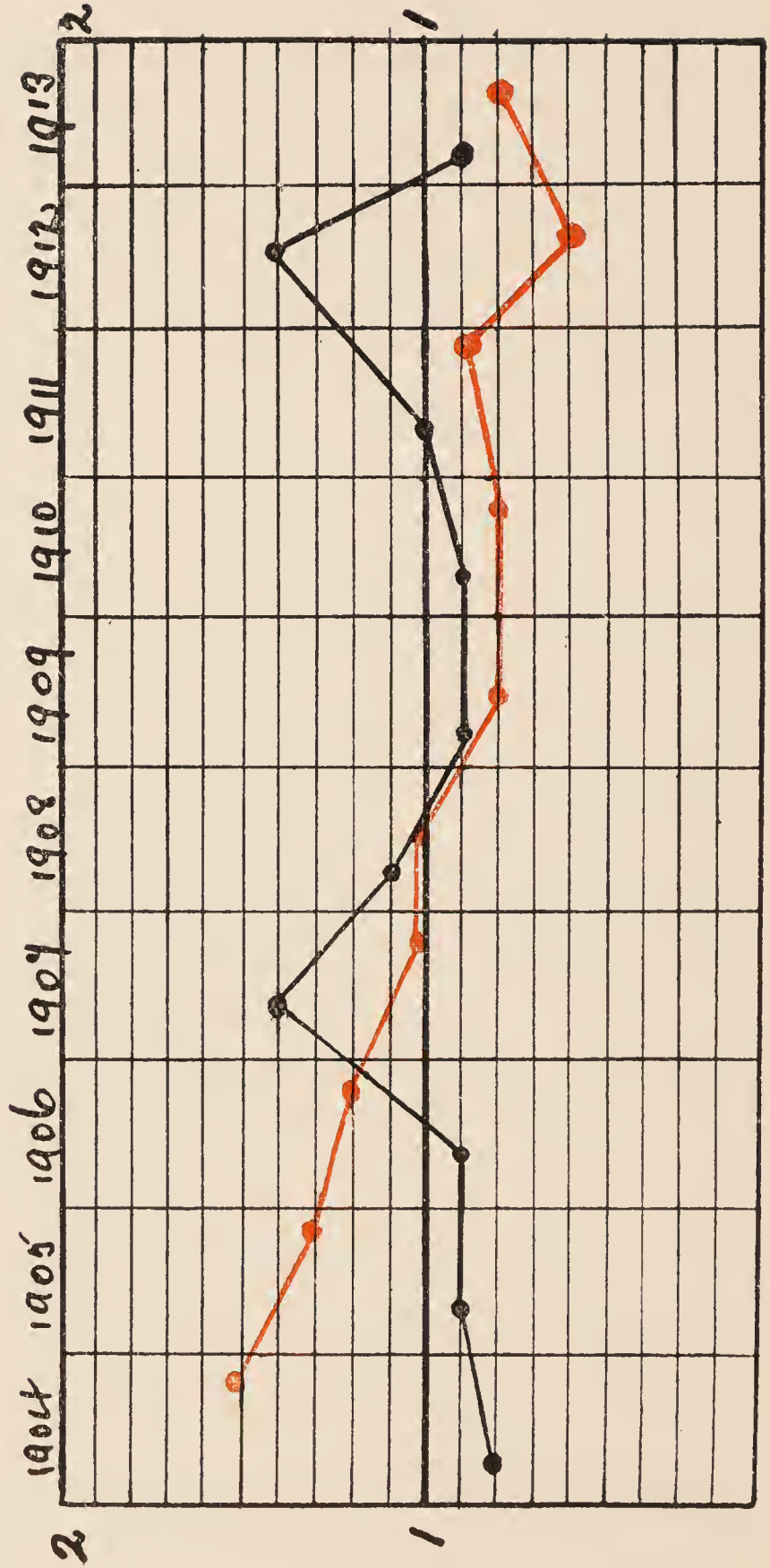
I do not know if the principle involved in lowered death-rates has ever appealed to the Council as a financial equation. I hope I may be pardoned for estimating the economic value of a human life at such a low figure as £150, but at such a value the saving to the district in the last six years compared with the first six years in which I have set out death-rates in chart I., has not fallen short of £130,000.

In chart II. will be found diagrammatic proportionate representation of causes of death.

RESPIRATORY DISEASES.

These diseases (Pneumonia and Bronchitis) continue to figure prominently as causes of death in this district. Ninety-five deaths (a rate of 2·9 per 1000) occurred in the district last year from the above causes. They included the deaths of 27 infants. The association of respiratory diseases with insanitary conditions is at

CHART III.
DEATH RATE PER 1000 FROM PULMONARY TUBERCULOSIS (BLACK)
AND NON-PULMONARY TUBERCULOSIS (RED) FOR 10 YEARS.



all times pronounced. The infant in a dirty home is infinitely more liable to attacks of Broncho-Pneumonia than is the infant in a clean house. As showing the influence of sanitation on respiratory diseases, I have observed that Broncho-Pneumonia and Bronchitis are much more prevalent than is Croupous Pneumonia and their incidence is in the main confined to dirty environments.

PULMONARY TUBERCULOSIS.

There was a welcome drop in the death-rate from this affection last year, but against this is to be put the alarming incidence of the malady there is in the district, discussion of which will be found in later pages of this report. Reference to chart III. will show that although in 1913 there was a drop in the death-rate, but little progress has been made in combating Pulmonary Tuberculosis as a cause of death during the last ten years. How far Sanatorium treatment will be able to alter the mortality rate in this malady remains to be seen. It can be said with some conviction that if Sanatorium treatment is to benefit Swinton and Pendlebury it will require to be of a very comprehensive nature and will have to be administered with breadth of outlook and interpretation. As the schemes which receive favourable recognition in the shape of grant are at present constituted, they aim more at reduction of death-rate than of incidence. One naturally concludes that the reduction of the latter would have involved reduction of the former. It is no doubt the duty and desire of every local authority to deal with the preventive side of Tuberculosis, but if the preventive involve the provision of open air schools which will be the means of diminishing the demands on Tuberculosis finance, then surely a local Authority is entitled to some financial help out of Tuberculosis grants.

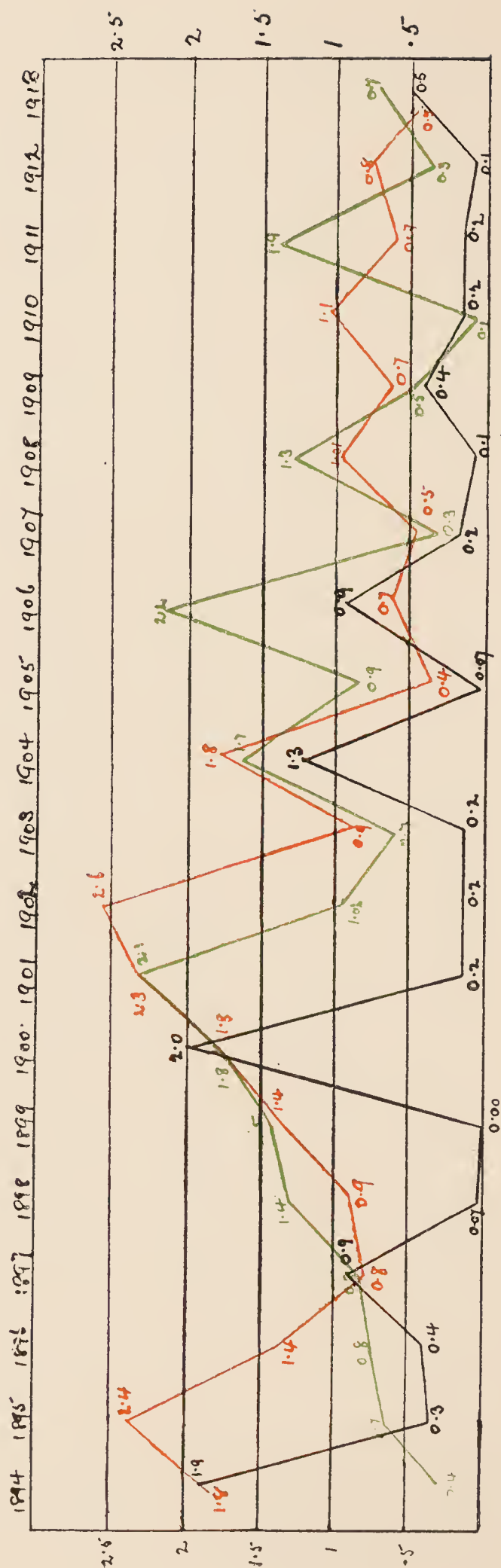
CANCER.

Thirty deaths from this affection occurred in the district last year. The disease has been gradually increasing during the last few years as a cause of death.

CHART IV.

DEATH RATE PER 1000 POPULATION FROM :—

MEASLES...(BLACK).
 SCARLET FEVER
 WHOOPING COUGH } ... (RED). AND DIARRHŒA... (GREEN).
 DIPHTHERIA
 ENTERIC FEVER



It will be observed that on 4 occasions the death-rate for Measles has been higher than the combined death-rates of Scarlet Fever, Diphtheria, Enteric Fever and Whooping Cough, and that on 8 occasions has the death-rate from Diarrhoea exceeded the already mentioned combined death-rate.

MEASLES AND DIARRHŒA.

I would like to call the attention of the Council to these maladies as causes of death.

MEASLES last year accounted for 17 deaths which was exactly the same number of deaths caused by Typhoid Fever, Scarlet Fever, Diphtheria and Whooping Cough combined. Reference to chart IV. will show that during the last 20 years, on 4 occasions Measles has exceeded the combined death-rate of the already mentioned diseases.

DIARRHŒA. The death-rate last year for this disease was higher than the combined death-rate of Scarlet Fever, Typhoid Fever, Diphtheria and Whooping Cough, and on 7 other occasions (as seen in chart IV.) has the death-rate from this disease exceeded the combined death-rate.

The administration of the control of Measles is admittedly difficult, but overcrowding and defective sanitation of home and school are potent factors. The administrative control of Diarrhœa (infant) in this district is embraced in one question, *i.e.*, the abolition of the conservancy system.

INFANT MORTALITY.

The chief feature of the infant mortality of the district last year was its excess over the 1912 figures. It will be remembered, however, that 1912 was a cold wet year, with consequent relatively low temperature of the sub-soil and frequent natural flushing of drains, yards, streets, etc.

I am indebted to G.W.T. Jesson, Esq., of Endsley, Swinton Park, for the following details of rainfall during the years 1912 and 1913 :—

Month.		Total Depth. 1912.		Total Depth. 1913.
January	..	3.79	...	3.65
February	...	1.34	...	1.27
March ...	...	5.69	...	3.55
April ...	...	0.82	...	3.97
May ...	...	2.47	...	2.58
June ...	...	4.82	...	2.28
July ...	...	4.60	...	1.23
August	...	6.71	...	2.62
September	...	2.28	...	1.90
October	...	4.42	...	1.71
November	...	2.75	...	3.77
December	...	3.92	..	2.67
Total ...		43.61	...	31.20

It will be observed that the months June to October, 1913, show comparatively light rainfall. As a consequence, the mortality from Diarrhœal diseases in 1913 was exactly treble that of 1912.

Respiratory affections of the Bronchitis, Broncho-Pneumonia type accounted for no less than 27 infant deaths, which is more than $2\frac{1}{2}$ times the number of infant fatalities from those affections in 1912.

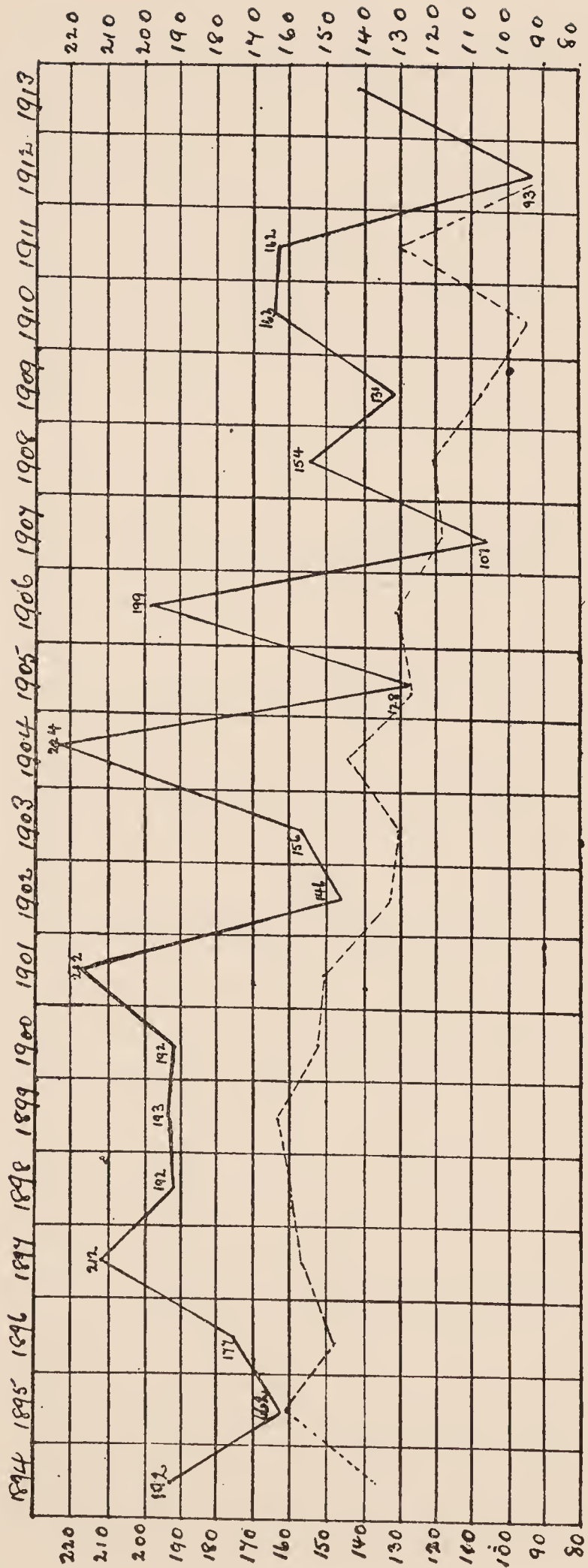
The number of deaths from prematurity and congenital defects was 31. 28 per cent., therefore, of all infant deaths in this district were due to such causes.

Fatality in the infant population would appear to reach a maximum between the second and the sixth month. Apart from congenital conditions, only 7 deaths occurred in the first month of life, three of which were to be attributed to Diarrhœa,

CHART V.

INFANT DEATH RATE (PER 1000 INFANTS BORN) FOR 20 YEARS.

The dotted line is the Death Rate (infant) during the same period for England and Wales.



Measles accounted for 7 deaths, so that Broncho-Pneumonia, which figured largely as a cause of death, cannot have been a complication of Measles, but a primary pathological condition the result of some other cause. Respiratory disease has invariably been productive of many deaths, both infant and adult, in this area, and the etiological factor, if difficult to define in many cases, especially in adults, is in infants so closely associated with unhygienic conditions, in which the dirty tenant figures more prominently than the neglectful landlord, as to be without doubt assignable to dirt and dirt only.

Congenital debility and prematurity are not assignable to any extent to the employment of pregnant women in factories in this district.

To what extent poverty contributes to debility of mother and fetus cannot be estimated, but it must be considerable. 27 men, 37 women, and 68 children received out-door relief in the Salford Union portion of Pendlebury alone, last year.

Infant Diarrhœa is the almost invariable result of artificial feeding without regard to the infinite care and cleanliness which must be observed in the administration of food. The dirty home, the defective bottle, the uncovered milk, the house fly, and the privy, each contribute their potentialities in the distribution of death from Zymotic Enteritis.

The rearing of infants by other means than breast-feeding is an artificial process brought about by artificial conditions of life and perpetuated by custom, example, and convenience. The human race would appear to be the only species of the mammalia in which signal failure of the physiological process of milk secretion is in evidence, and it cannot be denied that psychological rather than pathological processes are at work in the production of such an unhappy result. The force of example is great and the desire to adopt customs which apparently lessen responsibilities and ties—

apparently is said advisably, because in reality responsibilities are enormously increased by artificial feeding—is in the main but the acceptance of an immoral doctrine which example, as opposed to rational teaching, has expounded.

High pressure industry, social conditions of life and education have in turn been blamed, but it would appear that high pressure education, if properly controlled and administered, might be the very instrument adopted to combat a morbid process which is increasing in undue proportion.

At the last English Speaking Conference on Infant Mortality, to which the Council sent delegates, Dr. Munro Kerr, of Glasgow, read a paper in which he advocated, amongst other things, the notification of pregnancies to the Public Health Departments. He said this could be made, to a certain extent, administratively possibly by making such notification a condition of the receipt of the maternity benefit. The adoption of such an expedient would probably evoke much criticism, but it cannot be denied that the supervision of expectant mothers would in no small degree combat causes of inability to suckle and ante-natal causes of still-birth, and incidentally pave the way for normal labour. The time may come when education will have brought about such a desirable state that the ministrations of health visitors will no longer be needed in the post-natal period, and could then be diverted to the all important ante-natal period.

THE PREVENTION OF INFANT MORTALITY.

The Council adopted the Notification of Births Act when that measure was placed upon the Statute Book and have employed a Health Visitor to undertake preventive work in connection with the Act.

During 1913, Mrs. Johnson (Health Visitor) paid 1299 primary visits and 1209 subsequent visits in connection with birth notifications and 77 visits in connection with registered infant deaths.

Visits unaccomplished in 1912 swell the 1913 number. The Health Visitor and I have tried to tabulate the work she has accomplished in order to give it an interpretation which might be useful for comparative purposes and at the same time give in concrete form the information derived from the visits.

The two accompanying tables have accordingly been drawn up and, although not attempting to give all available information, they may be taken as representing the general conditions found by the Health Visitor at her visits to the homes of infants.

PRIMARY VISITS.

NOTIFICATIONS OF BIRTHS VISITS.

Total Number Investigated, 719 (during first 14 days of life).

Entirely Breast Fed, 660.				Bottle Fed, 59.			
Legitimate, 656.		Illegitimate, 4.		Legitimate, 55.		Illegitimate, 4.	
Healthy, 609.	Unhealthy, 47.	Healthy, 3.	Unhealthy, 1.	Healthy, 41.	Unhealthy, 14.	Healthy, 3.	Unhealthy, 1.
Irregularities in feeding. 0 Unsatisfactory sanitation. 8 Baby doesn't sleep separately. 609 Family circumstances poor. 11 Mother's health poor. 1	Irregularities in feeding. 3 Unsatisfactory sanitation. 13 Baby doesn't sleep separately. 47 Family circumstances poor. 0 Mother's health poor. 4	Irregularities in feeding. 0 Unsatisfactory sanitation. 2 Baby doesn't sleep separately. 3 Family circumstances poor. 1 Mother's health poor. 2	Irregularities in feeding. 0 Unsatisfactory sanitation. 0 Baby doesn't sleep separately. 1 Family circumstances poor. 0 Mother's health poor. 0	Irregularity in feeding (including dirty or defective bottles). 2 Unsatisfactory sanitation. 9 Baby doesn't sleep separately. 41 Family circumstances poor. 16 Mother's health poor. 7	Irregularity in feeding (including dirty or defective bottles). 6 Unsatisfactory sanitation. 10 Baby doesn't sleep separately. 14 Family circumstances poor. 9 Mother's health poor. 6	Irregularity in feeding (including dirty or defective bottles). 2 Unsatisfactory sanitation. 1 Baby doesn't sleep separately. 3 Family circumstances poor. 1 Mother's health poor. 0	Irregularity in feeding (including dirty or defective bottles). 1 Unsatisfactory sanitation. 1 Baby doesn't sleep separately. 1 Family circumstances poor. 0 Mother's health poor. 1

SUBSEQUENT VISITS.

NOTIFICATION OF BIRTHS VISITS. A.

Of the 719 children 665 were followed up at the end of three months,
and the results were as follows :—

Breast Fed, 426.		Bottle Fed, 239.	
Healthy, 301.	Unhealthy, 117.	Healthy, 139.	Unhealthy, 85.
Dead, 8.			Dead, 15.
Irregularity of feeding. Mother goes out to work. Insanitary home. No separate sleeping. Adverse antenatal circumstances.	Irregularity of feeding. Mother goes out to work. Insanitary home. No separate sleeping. Adverse antenatal circumstances.	Irregularity of feeding. Mother goes out to work. Insanitary home. No separate sleeping. Adverse antenatal circumstances.	Irregularity of feeding. Mother goes out to work. Insanitary home. No separate sleeping. Adverse antenatal circumstances.
27 1 40 295 9	33 0 57 114 12	18 1 29 139 3	50 2 30 85 11

Prejudicial ante-natal conditions which were in evidence were as follows :

1. Prolonged suckling.
 - (a) In the hope of avoiding future pregnancies.
 - (b) In ignorance.
2. Anxiety of mother.
 - (a) Large family.
 - (b) Poverty.
 - (c) Dissolute habits of father.
 - (d) Debt and pledging.
3. Illness of mother.
 - (a) Through insufficiency of nourishment.
 - (b) Ignorance of food values.
 - (c) Insufficient rest and sleep owing to existing large family.
 - (d) Want of proper exercise and ventilation.

INFANT CONSULTATIONS.

Twenty-seven consultations were held at the Pendlebury Town Hall between May and December. Eighty-three names were enrolled in the register, and there was a total of 478 attendances registered giving an average of 18 infants at each consultation.

The Civic Guild kindly supplied funds to provide Dried Milk, Virol and Emulsion to necessitous cases. Several ladies kindly put cow's milk and articles of clothing at the disposal of poor mothers. Messrs. Virol presented a weighing machine.

The infant consultations are most welcome to the mothers. An address on infant hygiene has been delivered at each meeting by the Medical Officer of Health. It is proposed to start a mothers' sewing class in connection therewith and instruction on infant handling and rearing will be given simultaneously to elementary school girls about to leave school.

TECHNICAL INSTRUCTION IN INFANT HYGIENE.

The Health Visitor gives instruction on infant hygiene at the Evening Continuation Schools.

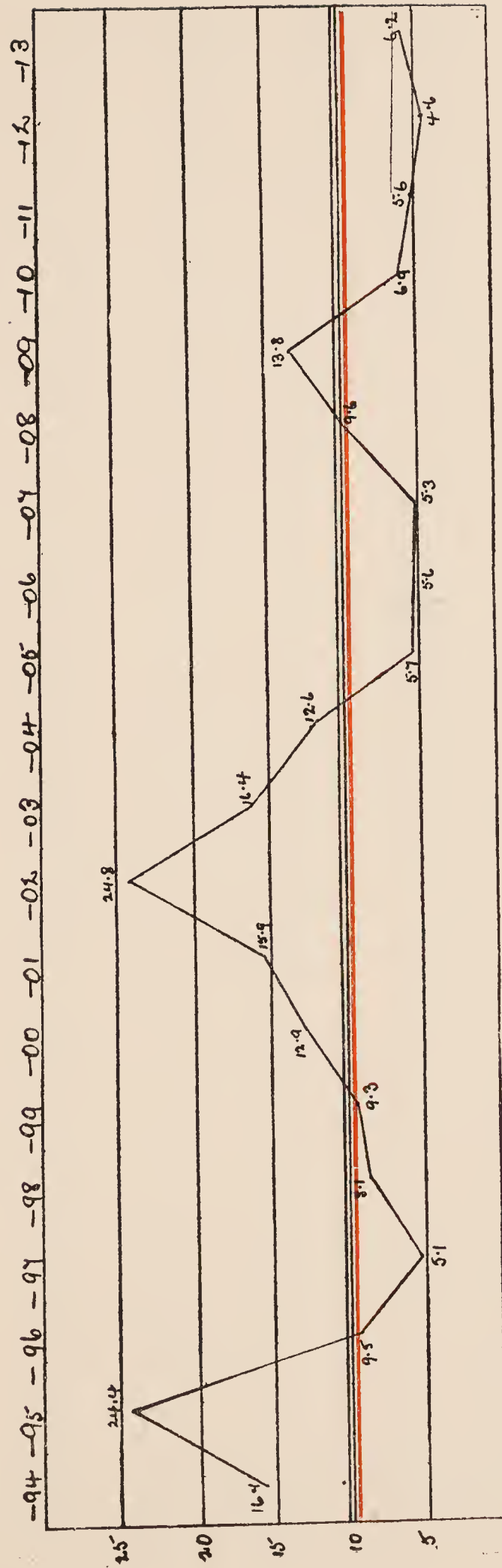
III. Infectious Diseases.

The year may be considered satisfactory in as much as there has been no considerable epidemic. In the later months fears were reasonably entertained that Scarlet Fever would have a considerable incidence owing to the prevalence of this malady in Manchester. However no undue attack rate of the affection was forthcoming. This may have been due to the fact that of undetected cases, there were none to act the part of carrier with such effective results as would appear to attend the presence in any area of an epidemic. It cannot be claimed that any considerable proportion of the Swinton and Pendlebury infectious cases have been isolated in hospital, as out of a total of 157 cases of Scarlet Fever, Diphtheria and Typhoid Fever, last year there were sent to the Salford Isolation Hospital at Ladywell, but 44 cases. This is a number greater in proportion to the attack rate than has been sent to Hospital from this sanitary area during such time as the Authority has made arrangements for the treatment of infectious cases, in Hospital. I asked the Sanitary Committee to allow me unlimited scope in the exercise of my discretionary powers with regard to Isolation Hospital utilisation. This was necessary in as much as I found on assuming office that the estimates for the financial year 1913-14 contained the sum of £300 only for Isolation Hospital treatment. Considering that the cost of maintenance in Ladywell of any Swinton and Pendlebury case is thirty shillings a week, that one guinea is charged for removal and one-half guinea for disinfection, and that a retaining fee of £70 per annum for 14 beds is required of this Council, the estimate for 1913-14 allows of but 21 patients being isolated in Ladywell, if the average period of detention be reckoned as 6 weeks. Such accommodation would be a negligible quantity in years of similar epidemic severity to 1902 when 373 cases of Scarlet Fever and 221 cases of Diphtheria occurred, and 1895 when 427 cases of Scarlet Fever occurred.

Such limited hospital accommodation can only be regarded as being useful in affording isolation to a limited number of such cases

CHART VI.

INCIDENCE (PER 1000 POPULATION) OF THE NOTIFIABLE DISEASES (1889 ACT)
FOR THE LAST 20 YEARS.



The rise in -95 was due to Scarlet Fever, that in -02 was due to Scarlet Fever and Diphtheria, and that in -09 was due to Scarlet Fever. The red line represents the mean.

as could not be accommodated with the most elementary isolation at home. That even a very limited hospital accommodation is useful when the very earliest information of individual attack is forthcoming is a well-known fact, but unfortunately sufficiently early information is not always forthcoming. Notifications often come when cases have been in a position to disseminate infection, as no doctor has previously had the opportunity of confirming a suspicion which entered the parental mind with the appearance of certain well-known, if slight, symptoms, the said suspicion becoming a conviction only when further developments necessitated or inspired the procuring of a medical opinion.

The utility of isolation hospitals has been much discussed recently. It has been pointed out that they have failed to stay the periodic epidemic visitations of Scarlet Fever and Measles. It has also been argued that the early use of anti-toxin in the treatment and prophylaxis of Diphtheria obviates the need for any elaborate barrier in this disease, and that the increased attention which has been given to sanitation of houses and food stuffs has brought about such a lessening in the incidence of Enteric Fever as to give this malady more of a historic interest than one calling for administrative effort. Whilst admitting that such conclusions have been arrived at with apparent logic, I fail to see how it is possible to isolate successfully, to the community and to the individual attacked, cases of infectious illness in property and under social conditions such as obtain in some parts of Pendlebury. A Local Authority is not a philanthropic body, and this argument might be advanced in favour of the avoidance of expenditure incurred in the removal of cases of illness to the better environment of an isolation ward, but a Local Authority is concerned in economics, and the preservation of life by the utilisation of every reasonable public expenditure is an economic transaction which requires no financial genius to endorse.

When the Salford Authority gave notice to the Swinton and Pendlebury Authority that the terms of a new agreement, which would come into force in April, 1914, for the isolation of Swinton

and Pendlebury cases at Ladywell would contain a clause which doubled the retaining fee per bed, a joint conference with the Eccles and Worsley Authorities, which are similarly situated to this Authority as regards isolation, was arranged. The joint representatives met in the Eccles Town Hall on October 8th. The problem the conference set itself was, "Would there be any economic advantage in the provision of a joint hospital?" Preliminary statements of an indefinite character only were made, but it was apparent that in any scheme which would be consented to by the Local Government Board for the erection of a joint hospital, the Worsley Authority would not be willing to join. It was resolved to make certain enquiries, and the conference adjourned *sine die*.

SCARLET FEVER.

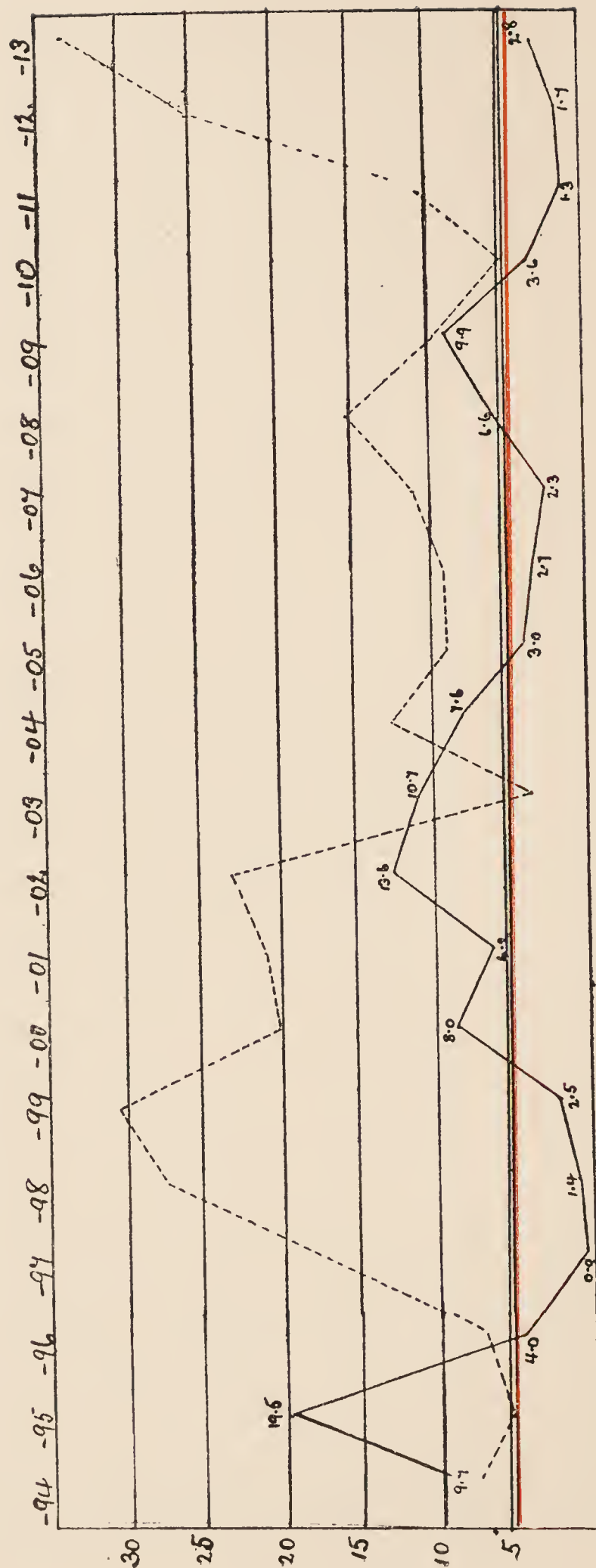
Ninety-four cases were notified in the district last year. The attack rate was 2·9 per 1000 population. Fifteen per cent. of these cases were above the age of fifteen. Thirty-one, or one-third, of the cases were removed to Ladywell. The distribution of the cases will be found in Local Government Board Table II. The attack rate per Ward was as follows :—

Victoria Park Ward	...	2·4	(per 1000 population).
Old Park Ward...	...	1·2	„ „
Moorside Ward...	...	6·1	„ „
Newtown Ward...	...	5·7	„ „
Market Ward	... ..	1·6	„ „
East Ward	... ..	0·8	„ „

In Moorside and Newtown Wards the cases occurred at different periods of the year. Thus while the Newtown visitation was coincidental with the Manchester epidemic in the fall of the year, the Moorside cases occurred mostly in May, and were all notified within a comparatively short time of each other. The history of the Moorside outbreak, which fortunately was a small one, is interesting. Certain members of a family living in this district, but attending a Worsley school, contracted the malady and

CHART VII.

Showing the incidence—rate per 1000 population of Scarlet Fever for the last 20 years.
 The dotted line represents the percentage of attacked cases sent into hospital isolation.
 The red line represents the mean of the attack rate.



were isolated at home. During their convalescence daily notifications of other cases in the same neighbourhood were received, until no less than 12 cases were known to have occurred in the small isolated area comprised in Ringlow Park Road and Water Street. From notifications received of cases which occurred in adjacent parts of the same Ward, it became evident that the outbreak had some definite association with Holy Rood School. Accordingly an individual inspection was made of the children in attendance at that school. Distinct evidence of peeling was found on the hands only of one child, but there was no other evidence of infection then or of recent indisposition in the child. Isolation of the case was resorted to, and concurrently with this isolation the receipt of notifications ceased.

There was no evidence forthcoming at any time during the year that Scarlet Fever had any connection with milk supplies.

Reference to Chart VII. will show that Scarlet Fever within the last 20 years has been subject to fluctuations, the study of which is of considerable interest. After an extensive epidemic in 1895 there remained a relatively immune population, and the attack rate fell immediately. A low attack rate for some years occasioned the production of a population of lessening immunity, and gradually the attack rate rose until in 1902 there was another considerable epidemic, but of less magnitude than the 1895 visitation. A smaller attack rate in the 1902 outbreak conferred necessarily less immunity than did the 1895 outbreak, the result being that there is not to be found the same crisis in the epidemic curve, but rather a lysis. Again in 1909 there was an epidemic of Scarlet Fever of still smaller proportions than were the two previously mentioned epidemics, and it is encouraging to note that with the development of sanitary reforms and the increasing activity of epidemic officers, each epidemic wave is less than its predecessor. It is instructive to note that the fastigium in the rise and fall of incidence would appear to occur every seventh year. On this analogy we may expect to be drawing near another epidemic year.

One feature of Scarlet Fever epidemics is to be noted, *i.e.*, the lessening severity of individual attacks. This has been attributed, and I think not without truth, to attenuation of the virus by increased sanitary administration in which properly-equipped Isolation Hospitals have played a considerable part.

DIPHTHERIA.

Thirty-six cases of Diphtheria were notified last year. Six of these cases were in persons over the age of fifteen. As far as the Public Health Department is aware the diagnosis was confirmed by bacteriological examination in six cases only, of those notified. The number of deaths from Diphtheria was four. The distribution of the affected cases was in no way significant of any definite source of spread. Two cases were sent to Ladywell.

Free antitoxin was applied for on 11 occasions.

Twenty-seven bacteriological examinations were made at Manchester University of material from suspicious throat affections. Nine of these examinations were in connection with School Medical Inspection work and the others were on behalf of general Practitioners in the district. I would like to see greater advantage taken of the facility the Council offers for the examination of throat swabs, more especially of swabs taken during convalescence of notified cases.

Fifteen cases of Diphtheria occurred amongst the patients in the Manchester Children's Hospital, Pendlebury, and are treated separately in Table II. Two Nurses and one resident Medical Officer at the same institution also contracted the disease and are included in the figures for the district in Table II.

ENTERIC FEVER.

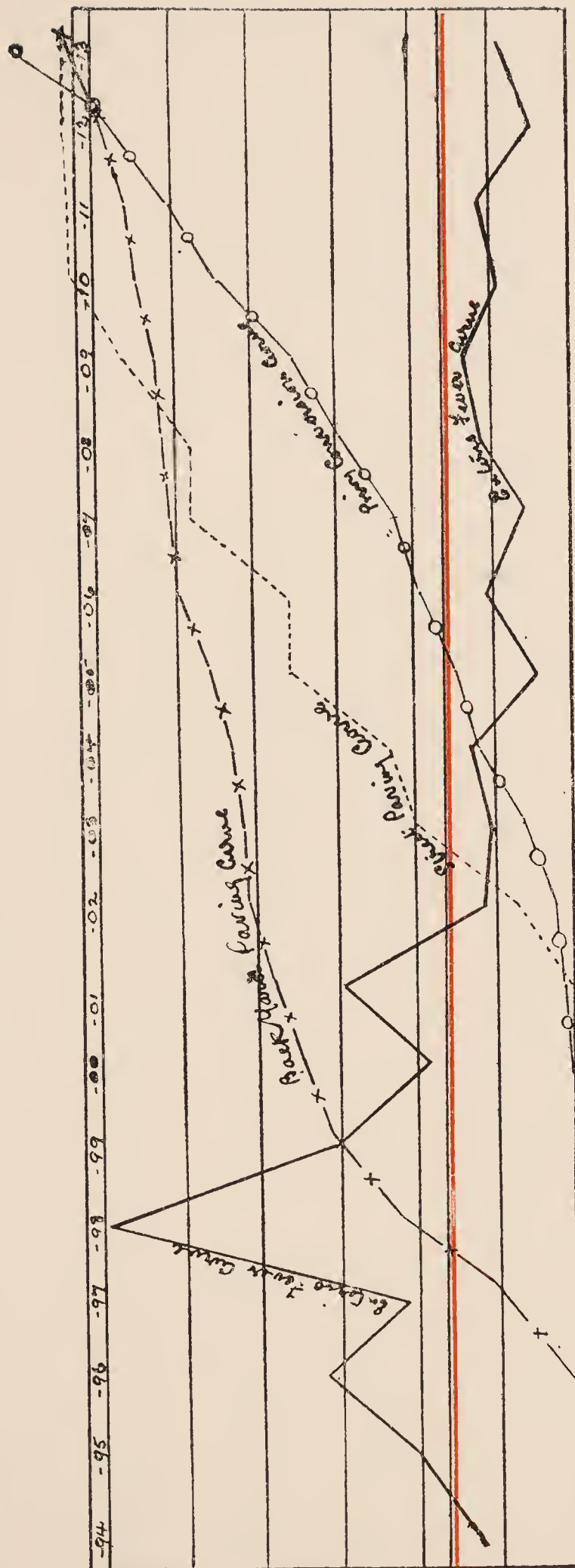
Twenty-eight cases of this affection were notified in 1913. The mortality was high, as nine of the twenty-eight cases died. Eleven cases were removed to Ladywell of whom two died. The mortality

CHART VIII.

INCIDENCE, PER 1000 OF POPULATION, OF ENTERIC FEVER FOR 20 YEARS.

The influence of certain sanitary improvements is also shown.

The red line shows the mean of the attack rate.



Each horizontal line above the base line represents —

- Enteric Fever Curve —an attack rate of 1 per thousand population.
- Street Paving Curve —25 streets (private) paved.
- Back Yard Paving Curve—350 back yards paved.
- Privy Conversion Curve —400 privies converted into water closets.

was thus 41 per cent. in the home-nursed cases and 18 per cent. in the hospital-nursed cases. Four members of one household contracted the disease of whom three died (two in hospital). Enteric Fever is a malady so dependent upon nursing for a favourable issue, that a higher mortality in the home-nursed cases is to be expected in cottage populations. It will not be seriously contended I hope, other things being equal, that a patient accommodated with a bed in some of the Pendlebury homes has an equal chance with the patient accommodated in a hospital ward.

The etiology of Enteric Fever is of the utmost importance to a community. The malady may be said to be endemic in Swinton and Pendlebury although the combined attack rate for the last ten years has been below one per 1000 population. Each year, however, brings a number of cases and the attack rate has never been lower than 0·5 per 1000. There obviously must be a reason or reasons for this, and in a community with such a substantial relic of the conservancy system of excremental disposal as this district has, one potent cause of endemicity is immediately forthcoming. Until the Council effected certain private improvements such as street paving, privy conversion and back yard paving, the attack rate of Enteric Fever was relatively high. A reference to chart VIII. will, I think, prove beyond all dispute that there has been a signal lessening in the incidence of this disease since the above-mentioned improvements were undertaken. There still remains, however, much work of this nature to be done and no better measure of the district's improving sanitary condition can be looked for than the disappearance of the endemicity of Enteric Fever.

Each of last year's 28 cases of the malady has been carefully investigated, but without conclusive proof of the source of infection in any single instance. I have observed from time to time that there appears to be a substantial demand for the cheaper varieties of shell fish in the district, yet a history of shell fish consumption was wanting in all 28 cases. It has been stated that the patient's memory at the time of attack, which, of course, is the usual time

for investigation, is not dependable and that the history of previous ingestions, etc., should be taken after recovery. This is reasonable. I have been struck by the possibilities for the spread of infection which would appear to exist in coal mines. In some of these the conveniences are few and consequently often remote from the particular part of the workings where at any given time they might be most in demand. The result is that excremental deposits foul the workings and I think it is conceivable that such conditions are instrumental in the spread of infection. Of last year's 28 cases 12 (42 per cent.) were miners.

It has been pointed out to me that Enteric Fever occurs with equal frequency in water-closet houses and privy houses in this district. I have admitted it does, and with the increase in number of water-closets and the diminution in number of privies, so long as privies exist in the district, cases will appear to have a greater relationship to water-closets than to privies. The relationship will only be apparent, however, as no one would say that the contamination of back passages with infected excrement and the consequent contamination of food by dust and flies, is, in an urban area with mixed closet accommodation, a danger any further removed from a water-closet house than a dry closet house. To those who still interest themselves in whether cases occur in water-closet houses or privy houses, I give the figures for last year despite their apparent contradiction of the benefits of a water carriage system. Fifteen water-closet houses and 8 privy houses were affected. From what I have already said I think the explanation is obvious.

The spread of infection of Enteric Fever by privies is prevented as far as possible in this area by the supply of special receptacles for excreta—the contents of these pails are disposed of at the Destructor—to houses in which actual cases of Enteric are being nursed, but the “carrier” continues to have unchallenged opportunity of infecting articles of human consumption by way of the privy and the passage in which the privy content is dumped before removal.

Taking the last 20 years and dividing them into two periods of 10 years and comparing the mean attack rate of Enteric Fever for each period, we find that for the decennial period 1894-1903 the attack rate was 2·29 per 1000 population and for the decennial period 1904-1913 it was 0·87 per 1000 population. This favourable result has been brought about entirely by work which the Council have in the cases of street paving and conversions undertaken themselves, and in the case of yard paving, have by the introduction of a bye-law, made compulsory on the owners. Herein lies a stimulus for further effort.

ERYSIPELAS.

Forty-five notifications of this affection were received during the year. In the early part of the year one case was sent to the Isolation Hospital and died there. It has been possible to do no more than classify notifications of the malady, which at no time during the year called for any special attention. One case of Puerperal Fever occurred in the practice of a midwife, who was suspended from practice pending the action of the County Authority.

CEREBRO-SPINAL MENINGITIS and ACUTE POLIOMYELITIS.

No cases of the former disease were notified during the year 1913. Two notifications were received in connection with the latter malady, one of which was probably not microbic. The other was a genuine case of Acute Anterior Poliomyelitis. The child affected recovered, but with permanent paralysis. No etiological factor which could be of value was obtainable in this case. There was the remote possibility of infection being carried by flies from the Manchester Children's Hospital.

OPHTHALMIA NEONATORUM.

Nine notifications of this affection were received last year, and in each instance in which a midwife was in attendance the County Medical Officer of Health was informed.

The following information concerning the non-notifiable infectious diseases is taken from the School Infectious Diseases Register. As school notification was not in operation until the middle of the year, the figures refer only to the latter half of 1913.

MEASLES.

Fifty-three cases were notified, of which 36 were in attendance at Holy Rood School. The action taken with regard to school attendance of actual cases and contacts was that advised in the joint memorandum of the Boards of Local Government and Education. The School Nurse visited all cases notified in order to pin up a card of instruction and warning. This arrangement was found to be more effective in procuring isolation and other precautions than the sending of leaflets by post. The time of greatest incidence, as one would have expected, was some two to three weeks after the re-opening of the schools in August.

WHOOPIING COUGH.

This malady would not appear from notifications received to have been prevalent in school children during the latter half of the year under review, nor is there any reason to doubt the accuracy of estimation of the incidence of the disease as measured by school notifications. Commencing on June 7th 17 notifications only were received from school teachers.

MUMPS.

This malady certainly reached epidemic proportions during that portion of the year for which we have definite information. From June 6th to the end of the year 320 cases were notified. St. Peter's Infant School furnished a large proportion of the notifications.

CHICKEN POX.

There were 40 notifications of this malady. All, with four exceptions, were received from St. Augustine's teachers.

Reference to prevalence of contagious skin diseases will be found in the report of the School Medical Officer.

The arrangements for isolation have already been reviewed, and it remains to be stated what are the arrangements for disinfection.

When a case is removed to Salford Isolation Hospital, the bedding is taken along with the case and disinfected at a fee of half a guinea per case. The walls of the room occupied by the infected case are sprayed with chinosol solution by a Council official, who also carries out aerial fumigation by means of sulphur dioxide fumes. When a case is nursed at home steam disinfection of the bedding has not up to the present been a part of the disinfecting process. The Council have for more than a year possessed a valuable adjunct to the preventive machinery of the district in the Manlove steam disinfector, but have not been in a position to take full advantage of this possession on account of having no proper van for the removal of infected bedding. Means were improvised for the removal of the bedding of tubercular patients for disinfection by steam, but the same means could not be utilised for the removal of bedding infected by Scarlet Fever and Enteric Fever cases. The Council are now providing a proper van for the removal of clothing, and henceforward the process of disinfection will be less perfunctory.

With regard to "return" cases of infective illness, no case of any infection was reported, as the result of the return from Ladywell of cases isolated there.

Contacts have been kept under strict supervision, and teachers and parents have, in the case of school children, been furnished with printed instructions as to the part each should play in the control of the movements of those, who from contact with the actual cases of infection, might be in a position to develop an attack at any time.

The Council on two occasions during last year gave compensation for articles seized and destroyed in order to prevent the spread of infection. One compensation was for the bedding of an Enteric Fever patient. This bedding, on being found to be saturated with dejecta, was burnt at the Destructor. The other case of compensation was for £10 worth of ice cream, ice, etc., seized at the house of a person who manufactures ice cream on the wholesale scale and supplies retailers. From this house a case of Scarlet Fever was notified, and prompt action was taken, which consisted in the immediate removal of the case to hospital, the destruction of all ice cream already manufactured or in process of manufacture, ice and milk, the disinfection of all utensils and the suspension of manufacture for eight days.

The Council have an arrangement with Manchester University for the bacteriological examination of specimens. The extent to which this provision has been used and the results of the examinations will be seen from the following statement :—

		Total.		Positive.		Negative.
Diphtheria	... ..	30	...	6	..	24
Typhoid Fever	...	8	...	1	...	7
Tuberculosis	... ..	36	...	8	...	28

TUBERCULOSIS.

The Public Health (Tuberculosis) Regulations, 1912, defined the duties of the Medical Officer of Health in connection with notifications received by him of cases of Tuberculosis. The action which, above all others, should be the particular effort of that official is preventive. Accordingly in each sanitary area the

Medical Officer to the Authority is expected to use every available effort to obviate infection spreading from person to person by direct or indirect means.

The regulations in a general way advise what the immediate action of the officer should be. He should, they suggest, pay, or cause to be paid, a visit to the home of the person whom the notification concerns, and should investigate there the source of infection, the best means in the particular instance of prevention of spread, and any means which should be utilised for removing conditions favourable to the incubation of the disease.

This would naturally involve investigation into any influence unfavourable to preventive measures, a comprehensive enquiry embracing questions of insanitary conditions such as overcrowding, bad housing, lack of sufficient sunlight and ventilation, together with economic problems and the investigation of contact, occupation and heredity.

The value of the investigation depends on its completeness and the machinery available for effective control of undesirable conditions brought to light by the enquiry.

The effectiveness of the machinery depends to a considerable extent on the administrative provisions of the area. If it be a Municipal Borough or an Urban District it will be dependent on what provision the County Authority administering the Tuberculosis grant of the National Insurance Act is in a position to provide for dispensary and sanatorium treatment. It would not appear that the isolation to any large extent, of those cases which are most likely to spread infection, *i.e.*, the advanced and open cases, is contemplated at present in county areas. In some County Boroughs, on the other hand, isolation of advanced cases is being practised, and this would appear, from a preventive point of view, to be one of the most effective measures in the control of Tuberculosis.

A Local Authority which does not administer Tuberculosis grant is, therefore, without direct control over a ready means whereby isolation may be effected without great burden on the district rate. In other words, the measures adopted often necessarily fall short of what may, in the opinion of the Authority, be the most beneficial measure in preventing dissemination of the malady.

Pulmonary and non-Pulmonary Tuberculosis are now notifiable infections, and it is therefore possible, with the knowledge which can be acquired of each individual case, to use the same measures, including removal to isolation hospitals, which are used in the spread of infection of the other notifiable diseases. Very few Local Authorities, however, have available accommodation for diseases other than those which tend to become epidemic, and so Tuberculosis is in a different category. The question of isolation of Tuberculosis in such a sanitary area as Swinton and Pendlebury, which has no isolation hospital, is one which presents no inconsiderable practical difficulty, and might, under present arrangements, be considered economically impossible.

It now falls to be described what has been the action in this district on receipt of notifications.

A primary visit is paid immediately after the receipt of a notification. One hundred and eleven such visits were paid by the inspectors in 1913. Enquiries are made and the information derived is entered on separate cards for each case. Cubic space, ventilation, sanitation of premises, contact, occupation, economic circumstances, history of illness and personal habits receive careful attention. Spit cups and paper handkerchiefs are supplied to expectorating cases, and printed information regarding the hygiene of Tuberculosis is supplied in unobtrusive form. Separate sleeping, where possible, is strongly advised. The attention of landlords is directed towards windows which do not open, and any other insanitary conditions which by his instrumentality might be remedied. Subsequent visits are made by the inspectors in order

to ensure the carrying out of recommendations. One hundred and nineteen such visits were made last year.

It has not been possible in the time at my disposal to examine contacts except in the case of school children.

Insured cases have been given necessary information regarding application for Sanatorium benefit.

Any publicity in action has been avoided.

In suitable cases the provisions of the Poor Law have been recommended. Voluntary organisations such as Gartside Street and Hardman Street Dispensaries, Manchester, have played no inconsiderable part in the administrative control and treatment of Tuberculosis in this area.

Classification of the primary notifications received during 1913 will be found on the following page :—

NOTIFICATIONS OF TUBERCULOSIS.

PRIMARY NOTIFICATIONS A AND B.

	All Ages.		Under 1 Year.		1 to 5.		5 to 15.		15 to 25.		25 to 45.		45 to 65.		Over 65.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Pulmonary ...	61	50	...	...	2	3	22	14	8	11	19	17	10	4	...	1
Non-Pulmonary	31	36	6	7	5	7	9	14	5	5	4	3	2	...	...	...
Total ...	92	86	6	7	7	10	31	28	13	16	23	20	12	4	...	1

FORM A.	Pulmonary ...	50	42	...	...	2	3	11	6	8	11	19	17	10	4	...	1
	Non-Pulmonary	28	33	6	7	5	7	7	11	4	5	4	3	2	...	...	...
FORM B.	Pulmonary ...	11	8	...	...	...	...	11	8	...	...	...	...	...	...	...	...
	Non-Pulmonary	3	3	..	...	...	...	2	3	1	...	...	...	...	...	...	...
	Total ...	92	86	6	7	7	10	31	28	13	16	23	20	12	4	...	1

The incidence of Pulmonary Tuberculosis in the district in 1913, based on notifications received, was 3·5 (per 1000 population) For the various wards it was as follows :—

Victoria Park	...	3·6
Old Park	...	2·2
Moorside	...	1·8
Newtown	...	2·7
Market	...	4·6
East	...	6·3

It was found by the utilisation of a spot map that in certain small areas in certain wards the Pulmonary Tuberculosis rate appeared to exceed the district rate or the ward rate. Accordingly the approximate populations of these smaller areas were arrived at by counting the number of inhabited houses in each and multiplying the number of houses by the census factor for the average number of persons per house. No great accuracy is claimed for the method of estimating the populations of these smaller areas. The estimation, however, allowed of comparative rates of incidence being made which might be considered reasonably instructive. Thus in the area including Back Oak Street, Union Street, Back Union Street, Hopwood Street, Cavendish Street and Gladstone Street, the rate was 8·6, in "The Croft" it was 20·06 and in Knowles Square it was 25·9.

From 6 houses more than one notification was received.

In 3 houses there were more than 2 persons per room. This, of course, usually means more than 4 persons per bedroom.

The average age of attack was—

In Pulmonary cases—

Males.

$25\frac{1}{2}$

Females.

$23\frac{6}{12}$

In Non-Pulmonary cases—

$14\frac{2}{12}$

$9\frac{1}{12}$

The occupations of the Pulmonary cases were as follows :—

				Males.	Females.
Coal mining (including pit brow workers)	..	...	...	17	2
Mill hands...	...	...	...	1	12
Housewives	...	...	...		11
Labourers ...	...	...	...	5	
Clerks ...	...	...	...	3	
Brass Founders	...	...	...	2	
Dress makers	...	...	...		2
Plumbers ...	...	...	...	1	
Masons ...	...	...	...	1	
Postmen ...	...	...	...	1	
Mechanics ...	...	...	...	1	
Stokers ...	...	...	...	1	
Basket makers	...	...	...	1	
Shop assistants	...	...	...	1	
Book-binders	...	...	...	1	
Policemen ...	...	...	...	1	
Messengers	...	...	...	1	
Butchers ...	...	...	...	1	
Bakers ...	...	...	...		1
Typists ...	...	...	...		1
Domestic servants	...	...	...		1
Nurses ...	...	...	...		1
Waitresses	...	...	...		1
No occupation	...	...	...	1	
School children	...	...	...	19	15
Children under school age	...	...	...	2	3
				—	—
				61	50
				—	—

The average income per affected household was £1 10s. 5d. per week. Three families were without income at the time of investigation. Eleven families had incomes of £1, or less, per week

Mr. Parkes, Clerk to District No. 22, Lancashire Insurance Committee, has kindly given me the following particulars concerning Sanatorium Benefit distribution in this area in 1913 :—

- 11 persons were granted domiciliary treatment.
- 1 of these died.
- 3 previously had received Sanatorium treatment.
- 2 were recommended for Sanatorium Treatment if their condition improved.
- 20 persons were admitted to Sanatoria.
- 2 granted Institutional treatment died before admission.

I am informed by Mr. Parkes that some cases are granted domiciliary treatment with special nourishment during the waiting period before admission to Sanatoria.

I have no information as to the distribution of Sickness Benefit in connection with Tuberculosis. Before this information were forthcoming it would be necessary to communicate with the Secretaries of the many insurance and friendly societies represented in this area. Such multiple representation in the disbursement of Sickness Benefit would appear to defeat one of the useful properties claimed for the Insurance Act, *i.e.*, the detection of Insanitary Areas. It is unlikely that Friendly Societies will make any representation to local Authorities except in cases where there is tangible evidence of the influence of bad environment, and yet it may be that certain insanitary property is the single factor in extensive sickness. The drain, however, on Sickness Benefit Funds being spread over so many different societies immediately loses its detective force.

Such co-ordination as exists between the County Authority and this Authority consists of the weekly notification to the County Medical Officer of Health of all cases of Tuberculosis which have been notified to this Health Department, the receipt by me of communications from the County Medical Officer of Health (who is

Chief Tuberculosis Officer for the administrative areas), concerning the removal of patients to and return of patients from Sanatoria. No Tuberculosis Dispensary is available for the treatment of the insured tubercular, and no scheme of treatment is in operation for the treatment of the uninsured tubercular.

It will be patent, therefore, that at present the treatment of Tuberculosis, apart from the treatment by general practitioners of insured and uninsured persons, is limited to a few Sanatorium admissions and a few cases of domiciliary treatment.

I cannot help feeling that if this Authority is to administer against a further increase in the incidence of Tuberculosis, they must have a broad outlook and be prepared to spend, I would rather call it invest, at present, so that they may save and gain in time to come.

Insanitary conditions are receiving more earnest attention each year at the hands of your officials. The remedy of bad housing, that housing which frequently is the incubator and perpetuator of Tuberculosis, is one of the most active interests of this Authority at the present moment. The education of affected persons in the hygiene of their affection and the erection of such barriers as are possible, are being assiduously practised. In spite, however, of these measures I do not look for any marked decrease in the Tuberculosis rate as long as we are without two great preventative measures, which operate, as it were, at the bottom and the top of the Tuberculosis scale. I refer to open-air schools, day and residential, establishing resistance in the pre-tubercular subject and effecting cure of the early tubercular subject, and the means for isolation of the advanced and open cases from whom undoubtedly almost all infection proceeds. My humble opinion is that if the grant for Tuberculosis of the Insurance Act had been allocated in proportion to each local sanitary area in aid of the establishment of open air schools and simple isolation erections, local authorities would have made more rapid progress in the eradication of this over prevalent disease.

The action, so far as disinfection is concerned, has been the usual spraying and fumigation of rooms occupied by patients who have removed or died, and the steam disinfection of the bedding. When the van for the removal of clothing is ready for service, disinfection will be carried out, at intervals, of the room and the bedding of infective patients who continue to occupy house accommodation in this district.

IV. Sanitary Circumstances.

WATER SUPPLY.

The water supply of the district is obtained from the Manchester Corporation supply, which comes from Thirlmere. The supply is a constant one. Every house in the district is supplied directly from the main. There is no household storage. Only one shallow well exists in the district from which the water is used for any purpose, and the purpose in this instance is non-domestic.

RIVERS AND STREAMS.

The river Irwell forms one of the boundaries of the district. Into the Irwell discharges the overflow of three cesspools in connection with 42 houses in Langley Road.

During the year, the abolition of pollution of the stream which flows through Swinton Park was effected. The overflow from a large cesspool, the existence of which was for a time a matter of conjecture, at Endsley, Swinton Park, and a cesspool at Endsley farm, discharged into the already mentioned brook, without any preliminary treatment. At the time of the investigation of the cesspool-pollution of the brook it was found that the main sewer running past the Children's Hospital, across Manchester Road into Swinton Park, had become disjointed through subsidence and that the sewage content was partially discharging into the brook. The owner, in the case of Endsley farm and Endsley, undertook extensive and costly work to effect connections with existing sewers, and the Council repaired the leaking main sewer. A water-closet has recently been added to stables in Swinton Park below the level of any existing sewer, and, in order to deal with the excrement, a small settling tank and filter bed are being constructed.

DRAINAGE AND SEWERAGE.

The drainage and sewerage is on the combined system throughout. The present sewer in Langley Road, which receives

the overflow of the cesspools there, discharges into the Irwell. This is the only part of the district in which sewerage is not properly effected. Langley Road is below the level of Slack Brook Sewage Works, and pumping would be necessary to get sewage from the former to the latter.

The peculiar geographical formation of the district led to the establishing of two sewage works, one deals with the sewage of that part of the district north of Bolton Road, together with the Newtown (Pendlebury) area ; the other and larger works deal with the remaining sewage of the district. The nature of treatment at each sewage works is : screening, detritus tanks, chemical precipitation in tanks, filtration through percolating filters (double contact in addition at Swinton) with humus tanks for the final effluent. The effluent in each case has been generally classed as satisfactory by the Mersey and Irwell Joint Committee.

An extension was made last year at Swinton sewage works. Six new percolating filters, of a total area of 2,700 square yards, an average depth of 8 feet, and provided with revolving sprinklers, and two humus tanks, each 90 feet by 15 feet, of a total capacity of 39,360 gallons, were added to the existing tanks. The total cost was £6,630.

The dry weather figure for the amount, per 24 hours, of sewage dealt with at Swinton works is 740,000 gallons, and at Pendlebury works 220,000.

The sewerage problems of this district are admittedly difficult. Mining subsidence has altered the levels, the falls, and even the direction of flow in existing sewers. Other sewers have been broken and silted up, with the result that serious flooding of streets and cellars has taken place in certain parts of the district, owing to the incapacity of the obstructed sewers to deal with a sudden excess of surface water in times of heavy rain. Plans of new sewerage, dealing comprehensively with the affected areas, have been prepared by the Surveyor, and the Council have resolved to

make application to the Local Government Board for consent to borrow a sum of, roughly, £11,000 for work to be undertaken at an early date.

Mining subsidence has by no means reached finality in this district, and the expenditure at this junction of a large sum of money on work which may at any time be as seriously affected as are the present sewers, is a matter which has caused the Council grave deliberation. (No legal responsibility attaches to the colliery companies.) On the other hand the claims for efficient sewers of certain rate-paying trades people, whose occupation is seriously inconvenienced and whose livelihood and health are threatened, can neither be disputed nor ignored.

The re-sewering scheme makes ample provision for the substitution of water-closets for every existing privy.

Intercepting traps are introduced at the drain sewer connections in every case in which a water-closet is inside a house, and the drain is ventilated in the usual way at the ground level or close to it near the intercepting trap, and the carrying to the roof of the soil pipe. There is ample evidence in proof of the inconstancy of air currents in the drains so ventilated.

Where water closets are outside structures no intercepting trap is fixed, and the common drain has a ventilating shaft placed at the upper end.

The ventilation of sewers is not provided for in the greater part of the district, but, in the more recently made sewers, ventilation is secured by means of special ventilating gas lamps. In addition, there is automatic flushing with town's water.

The older drains in the district, amounting to 20 per cent. of the whole drainage system, have puddled joints. On the whole, this arrangement is not disadvantageous, as concrete joints are apt to fracture in subsiding ground and puddled joints allow of a certain amount of flexibility.

CLOSET ACCOMMODATION.

The closet accommodation and ashpit and ashbin accommodation at present existing in the district, is set out in the following statement :—

Name of Ward.	No. of Houses.	No. of Water Closets.	No. of Privies.	No. of Ashbins.	No. of Dry Ashpits.	No. of Privy Ashpits.
East	1012	817	195	711	61	108
Market.....	1033	786	247	642	35	164
Newtown.....	1230	861	369	799	32	208
Victoria Park	1301	770	531	586	122	266
Old Park.....	1149	967	182	881	49	109
Moorside	910	608	302	594	22	160
<hr/>						
	6635	4809	1826	4213	321	1015
<hr/>						

The number of conversions from privy accommodation to water closet accommodation during the last five years will be found in the subjoined statement :—

	1909	1910	1911	1912	1913
East	69	26	54	14	13
Market	23	34	53	84	95
Newtown	66	87	34	60	48
Old Park	22	126	20	79	64
Victoria Park ..	33	40	82	57	121
Moorside	15	36	79	19	21
<hr/>					
	227	349	322	313	362
<hr/>					

The Authority up to the present time have made no contribution towards conversions. Notice has been served under Section 36 of the Public Health Act, 1875, wherever a privy was in such a state of disrepair as to render it an insufficient privy. The word “insufficient” would appear to allow considerable latitude in interpretation and it really is a debateable point, where a water carriage system exists, whether any privy may be considered

sufficient. I certainly do not think it would be a difficult matter to successfully contend that any privy, in an urban district with water carriage, was a nuisance under the meaning of the 1875 Public Health Act. Section 39 of the Public Health Amendment Act, 1907, gives authority whereby ~~conversion~~ of any existing privy, "sufficient" or "insufficient," may be converted to a water-closet. The local Authority is empowered to contribute towards the cost of conversion. In any wholesale scheme of conversion contribution must figure. Clearly there must come a time when insufficient privies will have disappeared and if the remaining privies are to be converted, some contribution will of necessity have to be made. I hope it is not necessary for me to point out what are the advantages of the water carriage system over the conservancy system. Anyone who has witnessed the emptying of a privy ashpit, cannot have failed to appreciate the abomination and menace that the conservancy system means to an urban community. To the infant population the open privy is the most lethal weapon that the hand of man has created. I would ask those who still maintain that the privy has advantages over the water-closet to refer to Chart VIII. in which the combined effect of privy conversion, and street and yard paving, on the Enteric Fever rate, is graphically shown.

In connection with conversions, the following legal proceedings were taken against an owner :—

Notices were served upon the owner of a block of houses under Section 36 of the Public Health Act, 1875. The houses were not old houses, but, owing to structural defects, the closet accommodation was insufficient and insanitary. The owner failed to comply with the notices and the Council proceeded to undertake the work of converting the privies to water-closets. The owner, however, obstructed the workmen and ordered them off the premises.

He was summoned to appear before a Court of Summary Jurisdiction for obstruction and was convicted and fined 10s. and costs. The work was afterwards carried out by the Council.

SCAVENGING.

In the following statement is set out the work of the cleansing department. The privy pails are those in the mills, the collieries and Victoria Park. The increase in the number emptied during the latter part of the year is owing to the increase of accommodation at one of the collieries where women are now employed at the pit brow.

The swilling of paved main roads, streets, and back passages after the collection of privy contents, has been continued.

CLEANSING DEPARTMENT.

		No. of Weeks.	No. of Ashpits emptied monthly.	No. of Ashbins emptied monthly.	No. of Privy Pails emptied monthly.	Loads carted to Destructor and Tip and sur- rounding Farms		No. of Applications for Ashpits to be emptied.	Loads of Offal and Garbage removed.
						Dry Ashes	Privy		
January	...	4	412	12,960	182	353	31	—	12
February	...	4	747	12,400	182	506	53	—	12
March	...	5	879	16,408	233	656	70	—	15
April	...	4	646	12,900	182	434	51	—	12
May	...	4	693	13,050	182	531	44	—	12
June	...	5	533	16,500	232	533	50	2	15
July	...	4	740	13,200	248	451	41	0	12
August	...	4	737	13,200	248	450	46	1	12
September	...	5	1081	16,550	310	582	62	2	15
October	...	4	977	13,400	248	455	66	2	12
November	...	4	803	13,400	272	400	58	3	12
December	...	4	809	14,000	272	449	58	1	12
<hr/>									
Total 1913	...	51	9057	167,968	2791	5800	630	11	153

EMPTYING OF GULLIES.

Nos. reported emptied :

Swinton, 34,994.

Pendlebury, 24,614.

The work of emptying gullies in the yards and cellars of dwelling-houses, etc., together with the gullies in private streets and back passages, also the clearing of footpath channels, by street orderlies, is undoubtedly of good effect. It is the means, in many instances, of bringing to the Sanitary Department's notice cases of neglect by tenants. Defects can therefore be dealt with before any serious developments have taken place.

ASHPITS AND ASHBINS.

There are 4213 movable ashbins with proper coverings in the district.

Three hundred and sixty-nine substitutions of movable receptacles for fixed receptacles took place last year.

WORK DONE BY SANITARY INSPECTORS.

Under headings (A) (B) (C) will be found classified the work of the Sanitary Staff during last year.

(A) Inspections Made.

						Number of Inspections.
Infectious Diseases	...	...	...	...	...	455
Tuberculosis, Pulmonary	...	...	...	...	...	230
Ditto	Non-Pulmonary	...	...	...	...	69
Factories and Workshops	...	...	...	...	...	197
Out-workers	...	...	...	...	...	4
Bakehouses	...	...	...	...	...	86
Dairies, Cowsheds and Milkshops	...	...	...	...	...	83
Overcrowding of Dwellings	...	...	...	...	...	23
Smoke Observations	...	...	...	...	...	37
Common Lodging-houses	...	...	...	...	...	16
Slaughter-houses	...	...	...	...	...	235
Fried Fish and Chip Potato Shops	...	...	...	...	...	69
Testing and Tracing Existing Drains	...	...	...	...	...	168

	Number of Inspections.
Water Tests made of House Drains where the Drains were being re-constructed	420
Supervision of Sanitary Work in Progress	3002
Complaints Investigated	53
Living Vans	33
House to House Inspections and Re-inspections, external conditions	1775

(B) Notices Served.

Description of Notice.	Number.
Statutory (principally under Section 36)	490
Informal	127

(C) Result of Service of Notices.

The notices enumerated in Table (B) relate to sanitary or other defects. It will be understood that one notice often covers a number of defects. The following is a summary of the number remedied :—

Housing.

Yard Paving defective	43
Internal Walls and Ceilings dirty	12
Rain-water Downspouts broken	3
Defective Eaves, Gutters and Roofs	24
Sink Waste Pipes defective	55
Dilapidated Ashbins replaced	57
Defective Floors	1
Privies converted to Water-closets	362
Ashbins substituted for Ashpits	369
Windows and Doors defective	5
Walls repointed... ..	4
Staircase repaired	1
Chimney Stack defective	1
Defective Supply Pipes, Water Mains	5

Water Closets.

Defective W.C. Cisterns	...	...	...	...	32
Ditto	Connection between Flush Pipe and Pedestal				10
Ditto	Water Supply Pipes...	..	...	...	13
Ditto	Pedestals replaced by new ones	...	...		15
W.C. Pedestals choked	...	...	...	...	109
Additional W.C.'s provided	...	...	...	...	3
Wash-out type of Pedestal superseded by Wash-down					8

Drains.

Choked	...	...	...	..	...	...	...	70
Faulty Jointing, Fall or Material	...	...	...	..				299
Defective Gullies	...	...	...	...	...	...		36
Drains under Buildings dispensed with	...	...						2
Intercepting Traps fixed between Sewers and								
					House Drains...			14
Rain-water Downspouts directly connect to Drains								114
Defective Soil Pipes replaced by $\frac{1}{4}$ inch Metal Soil								
Pipes, with caulked lead joints	...	...	...	...				10

FACTORIES AND WORKSHOPS.

Defective Walls of W.C.'s	...	...	...	...	1
Ditto	Lighting ditto	...	...	...	1
Insufficient Closet Accommodation	...	...	...		1

GENERAL.

Overcrowding of houses	...	...	...	...	5
Verminous Houses	...	...	...	...	5
Accumulations of Rubbish	...	...	...	...	1
Manure Pit defective	...	...	...	...	1
Householders fined for firing soot in house chimney					1

The following work comes within the classification of that accomplished by the Sanitary Inspectors. The work which of course is most beneficial, deprives the inspectorial staff of the services of one inspector for any other work during six months of

the year. It will, therefore, readily be appreciated that the remaining officers have to accept increased responsibility and increased work.

Last year 119 water closets were built and 68 house drains were re-constructed by contractors in the direct employ of the Council on behalf of 16 owners. The above arrangement entailed a considerable amount of office work, specifications having to be prepared for each owner's property and copies forwarded to six or seven contractors, in each case.

The total cost of the work carried out as above, including alteration to sink pipes, provision of pipe protectors, repairing and re-building division and boundary wells, and the provision of ash-bins, amounted to £923 an average cost per house of £7 13s. od.

In addition to the above, £217 was expended by the Council in re-laying sewers on owners' premises, found defective in connection with house drainage work carried out by the Sanitary Department.

Owners are allowed a maximum period of 7 years in which to repay.

By the foregoing methods good headway was made in obtaining conversions, with a minimum amount of friction, and legal proceedings were obviated.

SMOKE NUISANCE.

Thirty-seven observations were made last year, and in 15 of these the 5 minutes' limit was exceeded.

Two firms were warned and subsequently showed decidedly less tendency to commit the nuisance.

The transactions of the Smoke Abatement League make it clear that by the use of proper coal and the employment of skilled labour the smoke nuisance should be practically non-existent.

THE DESTRUCTOR.

Particulars available as to the amount of refuse disposed of in the Destructor and otherwise, are as follows :—

January 1st to December 31st, 1913—5000 loads.

Weight —7413 tons.

Number of other loads tipped at Pendlebury old tip and Destructor site—537 loads.

The tip at Pendlebury has been disused for some months.

No comparative statement of the cost of tipping and burning at the Destructor can be given. It is reasonable to assume that the latter process is the much more costly as no profit can be made out of clinker in this district. The steam supply for heating purposes to Cromwell Road School could be assessed and the amount deducted from the cost of the Destructor working.

An extra shift was employed at the Destructor last year thereby obviating any necessity for tipping. Limited tipping previous to the employment of the extra men was being carried out at Pendlebury tip.

I have found that several firms and individuals in the district have been in the habit of throwing old sacking, paper and waste of varying character on the Pendlebury tip. The practice has been strictly forbidden. Such articles as I have mentioned are favourable material for the breeding of house flies.

HOUSE FLIES and MANURE HEAPS.

The evidence that the house fly is an influential agent in the dissemination of disease is now abundant. The organisms of Tuberculosis, Typhoid Fever, Diarrhœa, etc., have been isolated from the external and internal anatomy of the fly, and it can readily be conceived how great are the dangers of spread of Zymotic diseases where flies are allowed to breed unchecked.

The favourite breeding ground of the fly is the stable refuse heap, and should the stable refuse remain unburied or untreated for over a week, grave danger to the community is threatened.

Last summer the following notice was sent to all occupiers of stables and premises where manure and garbage are collected :—

SWINTON AND PENDLEBURY URBAN DISTRICT
COUNCIL—PUBLIC HEALTH DEPARTMENT.

Dear Sir or Madam,

During warm weather it is highly desirable that manure, etc., should not be allowed to accumulate. You are therefore requested to effect the removal of any such matter as would be likely to become offensive, or would foster the breeding of flies, as speedily as possible. Manure should be removed once in seven days.

Any accumulation round which flies congregate is a serious menace to your health and that of your neighbours.

The accumulation ought not to exist and all flies ought to be destroyed by fly-papers or poisoned by the following solution kept in open dishes throughout the house—2 tablespoonfuls of formalin to a pint of water.

The importance of this from a health standpoint cannot be over-estimated. All receptacles should be kept constantly covered and they and their surroundings should be frequently lime-washed.

Yours faithfully,

W. STEWART STALKER,

Medical Officer of Health.

I fear this notice has not had the desired effect in as much as I find, occasionally, in the course of my visits concerning various matters, collections of stable and other manure which have been accumulating for periods which have approximated a month rather than a week.

The Council Bye-law regarding the removal of manure is as follows ;—

“ All occupiers of any yards, places, or premises, where horses, cattle, pigs, or other animals are kept, shall provide upon such premises to the satisfaction of the Local Authority, or their authorised officer, an enclosed receptacle for dung, manure and all other solid refuse arising on the premises, and a drain for carrying off all urine and other liquid drainage from such premises, or into such receptacles ; and if no means for the removal of such dung, manure, or other solid refuse, be provided by the Local Authority, every such occupier shall himself remove all such dung, manure and other refuse, at such intervals of time, with such precautions and within such hours as may from time to time be fixed by the Local Authority.”

The duty of seeing that the provisions of the Bye-law are being carried out rigidly is a difficult undertaking. The proof of non-removal is not always easy. I would, however, strongly recommend to the Council the necessity, even by means of prosecution, of enforcing the Bye-law.

COMMON LODGING HOUSE.

There is only one Common Lodging House in the district. The structural condition of the house throughout is good. There is ample provision for effective ventilation, for washing accommodation and for cooking, and the necessary conveniences are attached.

Sixteen inspections were made at the Common Lodging House last year and no infringement of the Bye-laws was detected.

No case of Sickness was reported.

The house is not used by vagrants ; the lodgers are mainly permanent.

MORTUARY.

There is one Public Mortuary in the district. No Bye-laws have been adopted with respect to this building.

PUBLIC CONVENIENCES.

There are only two in the district and further accommodation is very desirable.

OFFENSIVE TRADES.

There is only one offensive trade in the district. The trade in this case consists in the preparation of the fibrous layers of animal guts into fishing tackle, violin strings, etc.

No Bye-laws for the control of such trade processes are in force in the district.

PUBLIC BATHS.

The Baths, which include swimming pond, private baths and vapour bath, have now been in existence for some years. (The pond is open from April to October inclusive).

Attendances at the Baths last year were as follows :—

Swimming baths, 33,259.

Slipper baths, 2,801.

The pond water is treated on the Royle's system and the same water has been in use for a period as long as 5 months, but the Surveyor tells me that it is his intention to change the water once a month in future.

No analysis has yet been made of water subjected to prolonged use.

There are no Bye-laws in force respecting the Baths.

There is no public wash-house in the district. Considering the lack of efficient washing accommodation in many of the cottages, the need for public washing accommodation is urgent.

SCHOOLS.

A report on the hygienic conditions of the district schools and on the administration of the control of infectious diseases in Schools will be found in the report of the School Medical Officer,

V. Food.

DAIRIES, COWSHEDS and MILKSHOPS.

No. of Cowkeepers 16 (3 do not retail milk).

No. of Dairymen 10.

No. of Milkshops 7.

In addition to the above there are 10 Dairymen coming into the district who are non-residents.

The total number of Milk Purveyors, therefore, in the district is 40.

Eighty-three inspections of dairies, cowsheds and milkshops were made last year.

The conditions in some of the shippons in the district are decidedly unsatisfactory, the most noticeable defects being want of proper regulation as regards cleanliness of milkers and the presence of lofts over the cow-stalls.

The animals in many cases are ungroomed and are allowed to foul their udders with their own excrement. Herein is a potent source of milk contamination. Another defect obvious in some shippons is that no accommodation is provided where milk can be transferred from the milking bucket to the drums. This transference takes place frequently in the open yard. The milk obviously must run serious risk of contamination from dried excrement, etc., which is frequently blown about the yard.

No immediate cooling of milk would appear to find favour with cow-keepers. I should like to see all shippons and milk cows in the district in the commendable state in which I found the shippon and animals attached to the Manchester Education Committee's Cripple School in Swinton Park.

Five Milk Purveyors carry on in addition the business of general grocery, including the sale of onions, potatoes, soap, fire-lighters, brickdust, etc. It goes without saying that the dual enterprise is not without drawback as far as the purity of the milk is concerned. It is not difficult to imagine that floating particles of trade dust will settle in the milk at each uncovering.

In one milkshop I visited, the conditions as far as cleanliness and coolness were most desirable, but the milk was uncovered, the window was open and without protective covering and outside, removed but a few yards, was an open privy with an abundant patronage of flies.

Twenty-four samples of milk were purchased by the County Authority.

Two vendors were proceeded against during the year for adulteration and both were convicted.

From one cowkeeper in the district, who disposed of all his milk out of the district, samples were submitted to bacteriological examination. The milk was found to contain tubercle bacilli. The infection was traced to one animal which was slaughtered and found to be suffering from generalized tuberculosis.

BAKEHOUSES.

These have been visited regularly and are on the whole satisfactory. The smallness of some and the lack of extracting ventilation would appear to be matters which might receive consideration. Eighty-six inspections were made in 1913.

COOKED FOODS.

A considerable amount of cooked food is sold in the district and the preparation thereof would not appear to occasion any adverse comment. The exposure in windows and other unprotected places, however, of such articles of human consumption is a

dangerous practice which ought to be prohibited especially in towns where the conservancy system obtains.

I myself have seen in shops in the district, butter, sugar, cooked hams, etc., covered with flies, when the intervention of some butter muslin would have prevented the contamination which was inevitably taking place.

The following notice was sent last summer to all vendors of perishable articles of human consumption :—

Sir or Madam,

Your attention is directed to the importance of preventing the contamination of food by flies. In view of the fact that diseases are frequently conveyed by flies crawling over and infecting meat, fish, fruit, sweets, and other articles, and of the serious danger to public health which may thereby arise, articles grossly contaminated will be liable to be seized as unwholesome and unfit for the food of man.

It is to be hoped that purveyors of food will take every precaution to see that articles sold by them are kept covered from flies wherever possible. Milk-sellers are reminded that under no circumstances can they be permitted to sell milk from uncovered vessels.

Further particulars and advice may be obtained from the Public Health Department.

Yours faithfully,

W. STEWART STALKER,

Medical Officer of Health.

I am firmly of opinion that ready cooked and prepared articles of human consumption which have been exposed in open invitation to flies—which no doubt have in the course of their lives visited some adjacent privy—are as dangerous to human life as are tubercular meat and other forms of diseased animal food,

TUBERCULOSIS SEIZURES.

In the early part of the year a tubercular carcase was found in one of the slaughter-houses. Attendant circumstances reduced the indictment to one of contravention of a bye-law, and the occupier of the slaughter-house was fined 20s. and costs. Subsequently a beast's head was found, the glands of which were affected.

In two instances occupiers notified their suspicion of tuberculosis in animals slaughtered. The carcases were examined and condemned and destroyed. One suffocated beast was also destroyed.

I think it may be said emphatically that the amount of diseased meat discovered or surrendered is surprisingly small considering the large incidence of bovine tuberculosis there is. For the Authority's officials to exercise any effective supervising influence over sound meat preparation and sale is manifestly impossible with the present slaughter-house arrangements and the regulations in force regarding the control of these premises.

SLAUGHTER-HOUSES.

There are 18 private slaughter-houses in the district. There is no abattoir.

Two hundred and thirty-five inspections at slaughter-houses were made last year.

I have investigated the conditions in every slaughter-house in Swinton and Pendlebury, and their state, if generally satisfactory, that is as far as private slaughter-houses can be satisfactory, leaves in not a few instances something to be desired. One slaughter-house has been re-licensed on condition that substantial alterations are immediately undertaken. If these are not undertaken the Council will refuse further renewal of the license.

One very obvious defect in the majority of these structures is want of accommodation. The cramped space is in itself a menace

to securing meat from slaughter-house contamination. I have seen intestines being cleaned in close proximity to carcasses in the process of being dressed. This, it is to be hoped, is not a feature which characterises methods in many slaughter-houses.

The want of accommodation is also evidenced in the lairage. I have seen animals waiting for slaughter tied up just outside the slaughter-house door, which was open and a possible view afforded them of the proceedings inside. The erection in which the animals were accommodated was the only lairage, and the separation between slaughtering operations and carcasses and the live animals was little more than nominal. This state still exists.

It is difficult to conceive any just cause or impediment to butchers using a public slaughter-house. Against the inconvenience of restricted hours and removal of carcasses there is the greater convenience to the butcher and advantage to the consumer of slaughtering and dressing in an abattoir, added to which is public assurance which is well worth cultivating.

The butchers' meat which has the "stamp" of the qualified meat inspector at the abattoir upon it is, from a health point of view, a desirable commodity. The excusable ignorance of some butchers concerning certain pathological conditions, the multiplicity in number of private slaughter-houses, the varying and uncertain hours of slaughter at private slaughter-houses, and the opportunity and temptation to dress unsound meat in preparation for human consumption therein, make it almost imperative for the Authority either to erect an abattoir and compel the slaughter there of all animals meant for human consumption, or, as a less satisfactory alternative, take steps to enforce owners to give notice of the time of slaughter to the Medical Officer of Health.

In this connection it should be noted that only one carcass and one part, both tubercular, were seized last year in the district, and only three carcasses were voluntarily surrendered.

The Authority could advantageously turn their attention to the framing of some fresh bye-laws for the regulation of private slaughter-houses if such premises are to be perpetuated. I should like to advise the inclusion of bye-laws dealing with time of slaughter, and prohibiting the cleansing of intestines and manufacture of potted foods inside slaughter-houses.

FOOD AND DRUGS ACT.

Inspector Munro, of the County Police has kindly supplied the following information regarding the nature and number of samples purchased in this district for public analysis in connection with the administration of the above Act :—

Milk	...	...	...	24
Butter	...	...	...	9
Margarine	...	...	...	5
Lard	...	...	...	2
Coffee	...	...	...	5
Pepper	...	...	...	4
Ginger	...	...	...	4
Tea	...	...	...	2
Mustard	...	...	...	1
Sugar	...	...	...	1
Arrowroot	...	...	...	1
Potted Shrimps	...	...	...	1
Tapioca	...	...	...	1
Beer	...	...	...	2
Port Wine	...	...	...	8
Baking Powder	...	...	...	3
Total				66

VI. Housing of the Working Classes.

The 1911 census figures show that in the Swinton and Pendlebury area there were 6,035 private families housed under the following conditions :—

Families.		Persons.		No. of Rooms per Tenement.		No. of Persons living in a state of overcrowding.
26	of	49	.....	1	.. ...	23
127	,,	405	.....	2	.....	136
455	,,	1858	.....	3	.....	401
3494	,,	15674	.....	4	.....	1504
1377	,,	7046	.....	5	.....	201
556	,,	2844	.....	6	.....	79
						<hr/> 2344 <hr/>

343 remaining families lived in larger tenements without suggestion of overcrowding.

(The estimation of over-crowding is based on the number of persons per room, more than 2 persons per room being regarded as a state of overcrowding. This is in accordance with the principle of the Local Government Board as stated in a recent letter to this Authority.)

The estimated increase of population in the period between the taking of the 1911 census and the middle of 1913 is roughly 1,000. The population for 1913 has been calculated on the number of inhabited houses. The increase has thus been at the rate of 500 a year.

If the 1,000 increase be added to the 2,344 persons living in a state of overcrowding, the number 3,344 persons is arrived at, for whom extra housing would be necessary if overcrowding were to be dealt with comprehensively.

It may at once be said that the provision of new houses has fallen very much short of the desirable number.

In 1911	...	133	houses	were	completed
,, 1912	...	57	,,	,,	
,, 1913	...	43	,,	,,	

Thus, in 3 years 233 houses have been completed—an average of 77 houses per annum.

A generous calculation of the number of houses completed between the 1911 census and the 1913 estimation of population would be 150, as from the above figures it is apparent that dwelling house provision is dwindling. To what extent the 150 new houses have relieved the need for the 3,344 persons may be roughly arrived at by multiplying the number 150 by the average number of persons per house at the 1911 census, i.e., 4.68. The relief is only to the extent of 700, so that it is reasonable to assume that at the present time some 2,600 persons are living in undesirable conditions in so far as household accommodation is concerned.

It will no doubt be argued, and rightly too, that houses constructed recently are capable of accommodating more than an average of 4.68 persons per house. I am unable to give the accommodation in rooms of the houses built in 1911 and 1912, but for 1913 I give the figures (the rentals are also added) :—

No. of Rooms.		No. of Houses.		Rentals.	
4	7	{ 5 at 5/- per week	
				{ 2 ,, 5/2 ,,	
5	32	{ 25 ,, 5/2 ,,	
				{ 7 ,, 5/4 ,,	
6	2	{ 1 ,, 8/- ,,	
				{ 1 ,, 8/6 ,,	
7	2	{ 1 ,, 8/6 ,,	
				{ 1 ,, £34 a year.	

The total number of rooms available, therefore, as the result of the 1913 building operations is 214, giving accommodation for 428 persons at the rate of two persons per room.

A simple arithmetical calculation can now be set out. If in 43 houses there is accommodation for 428 persons, what accommodation has been provided in the 150 houses calculated to have been built between April 1911 and Midsummer 1913? The figure arrived at is, in a round number, 1,500. This again is inadequate relief, even were the distribution of population capable of such adjustment. Such a distribution is, however, out of the question, and the already mentioned figure 700 is the more accurate estimation of relief.

At the end of 1913 only 3 houses were in course of construction.

At the middle of 1913 there were but 29 empty houses in the district, and, of these, 5 were at the time of enumeration under closure orders. The remaining 24 empty houses were inclusive of the large empty houses adjacent to the Manchester and Bolton Roads.

With such conclusive evidence of overcrowding before us as the census returns, it may seem surprising that only 5 definite cases of overcrowding came under the direct notice of the Health Department. Two of these cases were of van dwellers, who, on being given preliminary notice, provided themselves with another van and so perpetuated and even multiplied an existing evil.

The other families in which overcrowding occurred, on the receipt of informal notice, dispersed the overcrowded members in different directions, no doubt to swell already congested households in the district.

It is evident, therefore, that only the grosser cases of overcrowding are brought to the notice of the Authority, and even were an inspectorial staff available for rapid house to house inspections for the discovery of overcrowded families, it is difficult to

conceive what action could be taken on discovery, in view of the lack of accommodation. It would be little short of a hardship to use any legal instrument against householders who were unable to allot one room for every two members of the family, because an outlet was not available. It would tend to drive people from the district. Yet two persons per room usually means 4 persons per bedroom, and complete consideration of such sleeping accommodation must embody moral as well as physical questions.

It is at all times instructive to compare districts similarly constituted, industrially and socially. I have selected four other districts in the County which may be said to closely resemble Swinton and Pendlebury, and I find that, whereas the percentage of the total population living in a state of overcrowding in Swinton and Pendlebury at the 1911 census was 7.9, in Farnworth it was 6.6, in Hindley 10.4, in Radcliffe 6.6, and in Leigh 8.0. From these figures it is apparent that this district is not more unfavourably situated than other similar districts. When the census returns of certain urban areas in another northern industrial county are brought into the comparison, this area occupies a flattering position.

It must be remembered that Pendlebury is a congested area—more particularly in Market Ward—and that the number of persons per acre in the whole district is a very erroneous measure of the congestion to be found immediately south of Bolton Road.

Further study of the Census returns make it apparent that in this district there must be an appreciable amount of sub-letting. In no other way can the occupation to such an extent as obtains, of single-roomed, two-roomed and three-roomed tenements by private families be explained. No control by bye-laws of houses let in lodgings is in force in the district, and the extent to which overcrowding could be prevented by the adoption and effective administration of such bye-laws is worth consideration.

1910. HOUSE INSPECTION REGULATIONS.

It was not until the last quarter of the year 1913 that the Council was in a position to effectively undertake the statutory obligation imposed by the above regulations. The appointment of a second Assistant Sanitary Inspector made it possible to concentrate the energies of one official on housing conditions, and in the period above-mentioned 74 houses were inspected and dealt with. A tabular statement of the findings at such inspections, and the action taken and results obtained in consequence of such findings is set out below :—

Number of Dwelling-houses inspected under Sec. 17 of the Act of 1909.	Number of Dwelling-houses considered to be in a state so dangerous or injurious to health as to be unfit for human habitation.	Number of representations made to Local Authority with a view to the making of Closing Orders.	Number of Closing Orders made.	Number of Dwelling-houses the defects in which were remedied without the making of Closing Orders.	Number of Dwelling-houses which, after the making of Closing Orders, were put in a fit state for human habitation.
74	74	13	13	—	—

It will be observed that the last two columns of the table show no figures. This is to be explained by the fact that so late in the year was the machinery for inspection set in motion that no time was available before the end of the year for the completion of remedial measures undertaken, but it may be stated that 54 houses are being repaired.

The above table is amplified in the following statement :—

Total Inspections, including Re-inspections.	Number of Houses Inspected.	Number considered to be unfit for Human Habitation.	Number of Informal Notices made.	Number of Closing Orders made.	Number of Notices served upon Occupying Tenants that Closing Order has become operative.	Number of Demolition Orders made.	Number of Houses with Obstructive Outbuildings.	Number of Houses in which Defects have been remedied after Informal Notice.	Number of Houses in which Defects have been remedied after Closing Order.	Number of Houses still in course of Repair.	Number of Houses still Closed.	Number of Houses in which Time Limit on Notices has not expired.	Number of Houses pulled down.
293	*74	74	62	†13	†13	5	1	—	—	54	13	7	—

* This number includes 5 houses inspected in 1912, but Demolition Orders were made and served during 1913.

† This number includes 5 houses for which the Closing Orders were served in 1912.

The Housing Committee, desirous at all times of giving owners the opportunity of contesting any requirements in the detailed specifications of defects and proposed remedies with which the owners have been furnished, have held, even in the short time during which the housing regulation work has been in progress, several protracted conferences with “aggrieved” parties. The conferences have been productive of very satisfactory results, as explanations have been forthcoming which rendered certain requirements to appear much more reasonable than they looked to be in the written specifications. So little has yet been accomplished that to look to future conferences for increasing benefit might be considered undue optimism. Nevertheless, the Authority will no doubt be prepared to give landlords every opportunity of conferring, both with themselves and with the officials.

Areas rather than individual houses have been scheduled for inspection.

Certain property which was irreparable has been closed without representation to the owner. Two houses required extensive alterations, which could not be undertaken without displacing the tenants. These houses have been thoroughly repaired and are now occupied.

The nature of the defects found was as follows :—

Defective condition of walls, ceilings, roofs, guttering, downspouts, etc.

Defective and leaky drains.

Insufficient light and ventilation.

Defective condition of water-closets and ash-bins.

Privies and ashpits in close proximity to house and structurally defective.

Defective paving and insanitary condition of yard and out-houses.

Animals kept in such a condition as to be injurious to health.

No proper accommodation for storage and keeping of food.

General delapidations for long-continued want of repair.

Houses in dirty and verminous condition.

Dampness of walls, ceilings, floors, etc.

Windows fastened, sash cords broken.

One defect which is practically universal in the class of property at present under inspection is the want of proper storage accommodation for food. No pantries exist, and such food as is stored is found uncovered on shelves in the living-room or wash-house scullery. The demand for proper storage provision would appear to landlords to be an altogether too substantial demand. They imagine they are being asked to build a larder. It is explained to them that efficient accommodation can be secured by making a small ventilating opening by the removal of two bricks from an outside wall and placing a small cupboard on the inside of the wall with a perforated opening against the wall opening. Unfortunately sufficient wall space even for this small provision is not always available, and shelves in a position least subject to contamination by dust and fumes seem to be the only reasonable alternative.

Another provision which is seriously contended is the fixing of a hand-rail on the staircase.

The question has frequently been asked "What powers have we to require the provision of certain things as in the Building Bye-laws of this Authority there does not appear to be the necessary power"? The answer is that comprehensive power is given by the wording of Section 17 (2) of the Housing Act of 1909 which is to the effect that if on the report of their Officer the Authority are of opinion that a house is so dangerous or injurious to health as to be unfit for human habitation, they can take steps to have each individual defect which combinedly make the whole defect remedied.

The closures of 10 houses has naturally but increased the congestion of other houses. Without the execution of substantial repairs, it would appear that there are not a few houses in Pendlebury awaiting inspection, the closure of which the Council will require to take into consideration. The position of other houses which are obstructive or are obstructed will have to be reviewed by the Housing Committee. The displacing of tenants from the cheaper class of houses, very often the defective class of houses, gives rise to the economic question "What provision in low rented houses in the district is being made." The answer is none. The labourer with a family, in receipt of £1 a week, is not in a position to pay 5s. or 6s. a week for a house, but, as will be gathered from a statement already made, no house has been built in 1913 or is being now built at a rental of less than 5s.

During the early part of the year a Demolition Order was put in force on five houses which had been closed in 1912 and which had not received the necessary repairs. The owner appealed to the Local Government Board and an Inquiry was held at which the appellant claimed that the dilapidation in the property over which the Inquiry was being held was due to subsidence, the result of colliery operations. The appeal was dismissed, the appellant having to pay costs.

Before closing this somewhat drawn-out statement on housing, it should be stated that an Authority which demands the often substantial execution of repairs from landlords should use every legitimate means to protect the landlord from the wilful abuse which undoubtedly is practiced on the property after repairs have been dealt with. The filthy walls, the damaged plaster, the broken flagstone, the foul closet and broken flush pull, are but a few of the defects one constantly sees for which tenants and tenants only, are responsible. A certain class of tenant would appear to regard the rights of ownership with desecration and to the culpable negligence, often amounting to serious damage he exercises, he unconcernedly adds substantial debt by failing week after week to

pay rent. The landlord's position is, to say the least of it, exasperating. True, he can get rid of the tenant, in itself often a matter of difficulty, and having done so there remains to him a dilapidated house and a debt he can never recover.

The following Memorandum, dealing with certain housing in the district, was presented to the Housing Committee in February, 1914. The result has been a Resolution by the Council to build 40 working class houses and deal with some 15 obstructive dwellings:

The Chairman and Members of the Housing Committee. (1913)

Gentlemen,

In accordance with your expressed desire, I beg to present this memorandum on the housing in Melbourne Street, Ellen Street, Alice Street and Whitley Street, in the area known as "The Croft," Pendlebury :—

MELBOURNE STREET.

Even numbered houses. Nos. 2 and 4 are in fair condition.

Nos. 6, 8, 10, 12, 14, 18 and 20 are structurally very defective both inside and outside, and no repairs which would satisfy the Authority could be effected without closure.

The yard behind these houses is common to all of them and to the odd numbered houses in Ellen Street and is narrow, and contains without any privacy all the water-closets which, like the houses and yard paving, are in a bad state of repair.

Odd numbered houses. Nos. 15 and 17. These have been recently repaired after notice from this Authority.

Nos. 3, 5 and 7. The condition is fair.

Nos. 9, 11 and 13. These are structurally defective both inside and outside.

MELBOURNE FLAGS.

1 to 7 (odd) and 2 to 6 (even) are structurally defective both inside and outside. Several of the houses are unfit for human habitation.

ELLEN STREET.

Odd numbers. Structurally defective inside and outside. Their association with the common yard has already been mentioned and they obstruct the proper circulation of air in the Melbourne Street Houses, and are obstructed themselves as regards air circulation by the Melbourne Street Houses.

ELLEN STREET.

Even numbers (10, 12, 14, 16 and 18). These are structurally defective both inside and outside, and share a common yard with the odd numbered houses in Alice Street by which they are prevented from having proper air circulation by the proximity of the backs of the houses in Alice Street.

2, 4, 6 and 8. The same applies with the exception that the inside conditions are not quite so defective.

ALICE STREET.

Odd numbers. Share common back yard with Ellen Street even numbers, from which they are separated by a narrow passage only. The same defect in air circulation applies here as in Ellen Street and Melbourne Street.

Even numbers. Structurally defective inside and outside.

WHITLEY STREET.

All structurally defective with the exception of No. 21 which has recently been repaired after notice from this Authority.

Four courses of action are open to the Council.

FIRST.

“ Knowles Square ” and “ The Croft ” could be combined and dealt with under Sec. 1 of the Housing and Town Planning Act as an insanitary area.

SECOND.

The odd numbers in Ellen Street and Alice Street could be dealt with as obstructive dwellings under the Housing and Town Planning Act. Several houses in Melbourne Flagg could be closed as unfit for human habitation as also could the even numbered houses in Melbourne Street until extensive repairs were effected. Any repairs which would satisfy the Authority could not be effected in the even numbered Melbourne Street houses without displacement of the tenants. The repair of the other houses in Ellen Street, Alice Street and Whitley Street could be effected in most cases without displacement.

THIRD.

The Council could call upon landlords of all the property to effect repairs to the Council's satisfaction without dealing with obstructive property.

FOURTH.

The Council could issue ordinary Closing Orders on the obstructive property and deal with the other property in the ordinary way.

I cannot recommend either of the last two policies. If the Council adopted method four, I fear that appeal might be sustained in as much as several of the houses inside are in quite a fair state of repair.

If method three were adopted it would but perpetuate the evil of obstruction.

In any case the Council is now faced with the urgent necessity of considering a building scheme and the problems which they will have to consider are as follows :—What rentals are to be charged for any houses the Council may provide? If the dispossessed of “ Knowles

Square ” and “ The Croft ” are to be housed, rentals not exceeding 4s. will need to figure prominently in the scheme. The present rentals in “ The Croft ” and “ Knowles Square ” approximate 3s. Then arises the question “ Is it equitable to charge provident people who live in slightly higher rented houses, although in many cases earning no greater wage, with the housing of often less provident people ?

If dearer rented houses are built there must be security against the provision of housing for people from outside districts. There is always the tendency for districts, on the outside of big cities, in which building operations are active, to become the dormitories of the cities. Again, if dearer houses are built there will be a tendency for the people in the better class of working class dwellings, to leave their present houses for the new houses. This will leave empty a class of house which the inhabitants of the present defective property will not feel inclined to pay for, in many cases cannot pay for, and if “ Knowles Square ” and “ The Croft ” remain, the anomalous state of affairs would be brought about whereby the defective property would still be occupied and the better class of property might not be in such demand.

All things considered it would appear that an initial scheme might be reviewed which would embrace dealing with “ The Croft ” and providing cheap houses for the dispossessed with the addition of some slightly higher rented houses to make provision for dearth of such houses which obviously (according to census returns) must be urgent.

I am, Gentlemen,

Your obedient Servant,

W. STEWART STALKER.

TABLE I.
VITAL STATISTICS OF WHOLE DISTRICT DURING 1913 AND PREVIOUS YEARS.

Year.	Population estimated to Middle of each Year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Un-corrected Number.	Nett.		Number.	Rate.	Of Non-residents registered in the District.	Of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1000 Nett Births.	Number.	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1908	29679		803	27.05	532	17.9	119	29	124	154.4	442	14.8
1909	30075		824	27.3	520	17.2	108	39	108	131.0	451	14.9
1910	30476		755	24.7	496	16.2	101	37	123	162.9	432	14.3
1911	30759		788	25.6	577	18.7	176	72	128	162.4	473	15.3
1912	31264		740	23.6	491	15.7	130	73	69	93.2	434	13.8
1913	31975	753	758	23.7	549	17.1	125	55	108	142.4	479	14.9

TABLE II. CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913.

Notifiable Disease.	Number of Cases Notified.							Total Cases Notified in each Locality.						Total Cases Removed to Hospital.	
	At all Ages.	Ages.						1 Victoria Park.	2 Old Park.	3 Moorside	4 Newtown.	5 Market.	6 East.		
		Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.								65 and upwards.
Small-pox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera—Plague ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria (including Membranous Group)	36	12	18	4	2	—	—	3	2	8	5	11	7	2	—
Erysipelas ...	45	3	2	6	13	15	6	10	5	6	8	13	3	1	—
Scarlet Fever ...	94	19	61	8	6	—	—	15	8	26	33	8	4	31	—
Typhus Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever ...	28	—	5	6	12	5	—	2	4	—	7	7	8	11	—
Relapsing Fever—Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever ...	1	—	—	1	—	—	—	1	—	—	—	—	—	1	—
Cerebro-spinal Meningitis...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis ...	2	2	—	—	—	—	—	1	1	—	—	—	—	—	—
Pulmonary Tuberculosis ...	111	4	36	19	35	16	1	22	14	8	16	22	29	*	—
Other forms of Tuberculosis	67	13	24	9	7	2	—	12	9	5	8	15	18	—	—
Ophthalmia Neonatorum ...	9	—	—	—	—	—	—	2	3	1	1	2	—	—	—
Totals	393	53	146	53	75	38	7	68	46	54	78	78	69	46	—

Cases of Infectious Disease which occurred in patients only in the Manchester Children's Hospital, Pendlebury, and which are not included in the above statement :—

	At all Ages.	Under 1.	1 to 5.	5 to 15.
Scarlet Fever..	8	—	2	6
Diphtheria.....	15	—	6	9
Poliomyelitis...	3	—	2	1

The Isolation Hospital accommodation for the Swinton and Pendlebury District is obtained by arrangement with the Salford Authority.

The Authority own jointly with Worsley a small hospital (20 beds) at Linnyshaw Moss for Isolation of Small-pox.

*Cases of Pulmonary Tuberculosis have been received into :—

Poor Law Institutions :— Hope Hospital. Barton Union Hospital.	Sanatoria in connection with the National Health Insurance Act. (Crossley's, Delamere. Meathop, Grange-over-Sands. Bull Hill, Darwen. Woodbourne, Edinburgh.
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Causes of Death.		Net Deaths at the subjoined ages of "Residents" whether occurring within or without the District.										Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District, 11
1		All Ages. 2	Under 1 year. 3	1 and under 2 years. 4	2 and under 5 years. 5	5 and under 15 years. 6	15 and under 25 years. 7	25 and under 45 years. 8	45 and under 65 years. 9	65 and upwards. 10		
	All causes { Certified ... Uncertified	475 4	108 ...	32 ...	17 ...	23 ...	27 ...	67 1	104 2	97 1	...	
1	Enteric Fever ...	9	...	...	...	1	...	4	4	...	...
2	Small-pox ...	...	...	...	...	...	...	...	...	...	...
3	Measles ...	17	7	7	3	...	...	...	...	...	2
4	Scarlet Fever ...	4	...	...	1	2	...	1	...	...	...
5	Whooping Cough ...	2	1	1	...	1	...	...	...	...	1
6	Diphtheria and Croup ...	4	...	...	2	...	...	...	...	...	...
7	Influenza ...	3	1	...	...	...	...	...	1	1	...
8	Erysipelas ...	...	...	...	...	...	...	...	...	...	...
9	Phthisis (Pulmonary Tuberculosis)	29	...	...	...	...	11	15	3	...	4
10	Tuberculous Meningitis	5	...	1	1	2	1	...	...	...	6
11	Other Tuberculous Diseases	22	10	3	2	2	3	1	...	1	18	
12	Cancer, malignant disease	30	...	...	...	...	...	6	13	11	2
13	Rheumatic Fever ...	...	...	...	...	...	...	...	...	...	...
14	Meningitis ...	2	...	1	1	...	...	...	...	...	4
15	Organic Heart Disease	28	...	...	...	1	1	9	8	9	...
16	Bronchitis ...	33	2	1	...	...	...	3	13	14	1
17	Pneumonia (all forms) ...	62	25	7	6	3	4	6	9	2	18	
18	Other Diseases of Respiratory Organs	...	...	...	...	...	...	...	...	...	...
19	Diarrhoea and Enteritis	24	21	3	...	...	...	...	...	...	10
20	Appendicitis and Typhlitis	...	...	...	...	...	...	...	...	...	...
21	Cirrhosis of Liver ...	3	...	...	...	...	...	...	3	...	...
21a	Alcoholism ...	...	...	...	...	...	...	...	...	...	...
22	Nephritis and Bright's Disease...	10	...	...	...	2	...	2	4	2	2
23	Puerperal Fever ...	...	...	...	...	...	...	2	...	...	...
24	Other Accidents and Diseases of Pregnancy and Parturition	2	...	...	...	...	...	2	...	...	...
25	Congenital Debility and Malformation, including Premature Birth	31	31	...	...	2	1	3	2	...	17
26	Violent Deaths, excluding Suicide	9	1	...	...	...	...	3	2	...	...
27	Suicide ...	4	...	...	...	...	...	1	2	1	...
28	Other defined Diseases	143	9	7	1	7	6	14	42	57	41	
29	Diseases ill-defined or unknown	3	...	...	...	...	...	1	2	...	...
Totals		479	108	32	17	23	27	68	106	98	126	
Sub-Entries. 28 (a) Poliomyelitis		...	...	1	...	...	...	...	...	...	1

TABLE IV.

INFANT MORTALITY

1913. Nett Deaths from Stated Causes at Various Ages under 1 Year of Age.

Causes of Death.		Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total deaths under 1 year.
All Causes	{ Certified Uncertified	...	...	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	3	4	7
Scarlet Fever	...	...	...	...	...	...	...	...	...	1	1
Whooping Cough	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...	...	...	1	1
Tuberculous Meningitis	...	...	...	...	...	...	...	2	1	1	5
Abdominal Tuberculosis	...	...	...	...	...	...	1	2	...	1	4
Other Tuberculous Diseases	...	...	...	...	...	...	1	...	...	...	...
Meningitis, (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...
Convulsions	...	...	...	...	...	...	...	...	...	...	...
Laryngitis	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	...	...	...	...	...	1	...	1	...	2
Pneumonia (all forms)	...	...	...	1	...	...	7	4	9	4	25
Diarrhoea	...	...	...	...	1	1	1	1	3	1	6
Enteritis	...	...	...	1	1	2	4	7	1	...	15
Gastritis	...	...	...	...	...	...	...	1	...	...	1
Syphilis	...	...	...	1	...	1	...	1	...	...	2
Rickets	...	...	...	...	...	...	...	...	...	...	...
Suffocation (Overlying)	...	...	...	...	...	...	1	...	...	...	1
Injury at Birth	...	...	...	...	...	...	...	...	...	...	...
Atelectasis	...	...	...	...	...	...	...	...	...	...	...
Congenital Malformations	...	1	...	...	...	1	1	...	1	...	3
Premature Birth	...	10	1	3	...	14	1	1	...	...	16
Atrophy, Debility, and Marasmus...	...	1	...	...	...	1	5	4	1	1	12
Other Causes	...	...	...	2	...	2	...	1	1	3	7
Totals	...	12	1	8	2	23	23	24	21	17	108

Nett Births in the year : Legitimate, 740, Illegitimate, 18.

Nett Deaths in the year : Legitimate infants, 104, Illegitimate infants, 4.

FACTORIES AND WORKSHOPS ACT, 1901.

WORKSHOPS, WORKPLACES AND HOMEWORK.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Premises.	Number of Inspections.	Written Notices.	Prosecutions
Factories (including Factory Laundries) ...	13	3	—
Workshops (including Workshop Laundries)	270	6	—

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES (Nuisances under the Public Health Acts).

Particulars.	Defects Found.	Defects Remedied.	Prosecutions
Want of Cleanliness	6	6	—
Want of Ventilation, intervening space between Closets and Workroom...	1	1	—
Sanitary Accommodation { insufficient	1	1	—
{ unsuitable or	1	1	—
{ defective...	—	—	—
{ not separate for sexes	—	—	—
Total	9	9	—

3.—HOME WORK.

Nature of Work.	OUTWORKERS' LISTS.					
	Sending twice in the year.			Sending once in the year.		
	Lists.	Outworkers.		Lists.	Outworkers.	
		Con-tractors.	Work-men.		Con-tractors.	Work-men.
Wearing Apparel, making...	2	—	1	—	—	—
Umbrellas, etc.	2	—	1	—	—	—
Total	4	—	2	—	—	—

4.—REGISTERED WORKSHOPS.

Important Classes of Workshops on the Register at the end of the Year 1913.	Number.
Bakehouses	43
Boot, Shoe and Clog Repairing	26
Chip Potato and Fried Fish Preparing	19
Ice Cream Makers	5
Dressmaking, Millinery and Tailors	20
Joiners	2
Metal Workers, Tin-plate Workers and Whitesmiths...	7
Manufacturers of Mineral Waters	1
Laundry	1
Total Number of Workshops on Register ...	124

5.—OTHER MATTERS.

Class.	Number.
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Acts, 1901	3
Notified by H.M. Inspector	
Reports (of action taken) sent to H.M. Inspector	2
Underground Bakehouses—	
Certificates granted during the year	None
In use at the end of the year... ..	7

School Medical Officer's Report

ON THE

Medical Inspection of School Children.

Mr. Chairman, Mrs. Postlethwaite, and Gentlemen.

I beg to submit my first Annual Report as School Medical Officer to the Swinton and Pendlebury Education Authority.

I entered my duties on the 21st of April last. The work during the early part of the year was undertaken by Dr. R. Hosegood pending a permanent appointment being made.

Before I commenced work Dr. Hosegood had left the Authority's service, as also had Nurse Shann, the School Nurse. No record of the amount, nature and results of the work done during the early months of 1913 is available, and the figures and other matter in the following pages relate to work which was accomplished subsequent to April 21st.

My first duty was administrative. The Board of Education had required this Authority to reconsider and reconstruct the scheme of Medical Inspection, and with a view to accomplishing this object, I set myself to formulate a new scheme of work, and got necessary forms, etc., printed. I also made arrangements with teachers and attendance officers for the immediate opening of an Inspection Clinic. This latter arrangement was a very necessary one, as there was a considerable accumulation of physical ailment, real and imaginary, influencing school attendance with which an Inspection Clinic Branch of the School Medical Service only could effectively deal.

Meantime the Authority had appointed a School Nurse in the person of Miss Elizabeth Walker, and on June 9th actual Inspection commenced.

Details of the work accomplished up to the end of 1913 will be found in the following pages.

I would like to register my thanks to the Committee for their sympathetic attitude towards any development of the work of Medical Inspection which it has been my lot to propose. This sympathy no doubt will receive a stimulus and at the same time a reward on the receipt of grant. Now that the Board of Education are willing to pay half the cost of Medical Inspection, where a scheme receives their favourable recognition, work of an ameliorative nature will no doubt figure more in the schemes of Authorities who have hitherto regarded the cost only.

The Board clearly indicate that they regard academic work unattended by practical issues with disfavour, and they look to Education Committees to formulate comprehensive schemes of Medical Inspection whereby physical defect will be remedied and prevented, and physical capacity co-ordinated with the industrial life beyond school years.

The remedy and prevention of physical defect in the elementary school child is somewhat complex, but in the main depends on two factors, good homes and good schools. A good home life usually implies that every reasonable means will be taken to secure for the child a healthy life, and school life should supply the deficiencies that cannot in reason be met by the home life. If the school children remain physically incapacitated by lack of means or opportunity, it is the duty of Education Authorities to provide the means and opportunity. Such considerations have no doubt been responsible for the statutory powers by which Education Finance may be used in the feeding and medical treatment of elementary school children.

It is my pleasing duty to record my indebtedness to the Secretary for Education (Mr. Postlethwaite) and the Assistant Secretary for Education (Mr. Holmes) for many kindnesses and helpful acts, to Nurse Walker for loyal co-operation and intelligent interest in the work, and to the Attendance Officers and Teachers for assistance without which the work would have been severely handicapped.

I am,

Your obedient Servant,

W. STEWART STALKER.

STATISTICAL SUMMARY.

Total Number of Schools—Provided	...	...	2
„ „ „ Non-provided	...	...	9
			—
			11

Accommodation—Provided Schools	...	...	1,508
„ Non-provided „	...	...	3,700
			—
			5,208

Average Attendance for last Completed School Year	4,447
Per cent. of „ „ „ „ „	85.3
Number of Children under five years of age on books	517
„ „ „ „ Average attendance	308
Number of half-timers	70
Assessable value for Education Purposes	£122,924
Elementary Education Rate	1/7 in the £.
Yield of 1d. rate (for aid Grant Purposes)	£482
Grants from Board of Education (current year)	£8,754
Cost of Medical Inspection to 31st March, 1914	£193
Income limit for Meals. 10/- for first two people in family, and 2/- per head onwards.	
No. of Meals supplied year ended 31st March, 1913...	21,014
Cost of Meals „ „ „ „	£268 3s. 2d.
No. of Children in Deaf, Dumb and Blind Schools	4
In Preston Industrial Institute for Deaf and Blind, No. 28817	1
In Henshaw's Blind Asylum, Old Trafford	1
In Manchester Royal School for Deaf and Dumb	1
In Boston Spa St. John's Institution for Deaf and Dumb	1

WORK ACCOMPLISHED.

Routine Inspections	...	...	957 (Entrants 579, Leavers 378)
Special Cases	...	...	47
Re-inspections	...	...	199
Visits to Schools for Medical			
Inspection only	...	...	47
Consultations at Inspection			
Clinic	...	...	1,738
Nurse's Visits to Departments			62
Nurse's Visits to Homes	...		474
Children examined for Cleanli-			
ness	...	...	3,918

In connection with the above work it will be remembered that it is concerned with a period commencing in June only.

The alteration in the Medical Inspection year, recently announced, by the Board of Education, operating with the above circumstance, has curtailed the number of leavers examined. In future years there ought to be no appreciable leakage, for Medical Inspection of "Leavers" will now be conducted on children who attain the age of 12 during the Medical Inspection year. Thus no child will have left school, as has frequently happened, before receiving the "leaving" medical examination.

The burden of clerical work in connection with Medical Inspection is a serious demand on the time of the School Nurse. In the monthly reports which are submitted to the Education Committee, the number of hours the Nurse devotes to clerical work is stated. The question should be considered whether the time of the Nurse thus occupied might not be devoted to work of a more productive nature. There is ample work to occupy a whole time clerk in the Public Health and School Medical Departments.

ARRANGEMENTS FOR MEDICAL INSPECTION.

The arrangements for Medical Inspection are briefly as follows :—Teachers are given several days' notice of an intended visit for Medical Inspection. The School Nurse visits each Head Teacher and explains the grouping of children for inspection purposes, the filling in of such information on the schedule of inspection as the teacher may best accomplish, and the requirements as regards room which will be necessary on the day of inspection.

Invitations are issued by teachers to parents, of each child to be medically examined, to be present on the day of inspection and information regarding the previous health of each child is provided for schedule purposes on forms which parents are asked to fill up.

About 20 children are medically examined at each visit to a school for inspection purposes.

A complete physical examination, such as is required by the regulations of the Board of Education, is made of each child. In order to make such a physical examination, the child must be stripped to the waist. This proceeding has been met with resentment by certain parents, and has occasioned some criticism in Committee. I have explained to members that any examination which does not include investigation of the condition of the spine and the back of the lungs is essentially incomplete and inaccurate in estimating the physical capacity of the child for employment in factories, and that the Board would be dissatisfied with anything less complete. It would appear that an idea was prevalent that no stripping whatever was contemplated by Medical Inspection.

The height and weight of each child is ascertained at Medical Inspection, the weighing and measuring being done under my supervision.

After inspection, the parent of each defective child is notified if defects are of such importance as to call for remedial measures. Teachers are supplied with lists of defective children, as it is but right that they should know who are and who are not physically well endowed. Apart from the notifying of parents and teachers the information derived at inspection is confidential. No application for any information has come from the Labour Bureau, but in my capacity as Certifying Surgeon I have been able to constitute myself, in so far as physical capacity is concerned, a juvenile employment supervisor.

Some disturbance of class arrangements at Medical Inspection is inevitable. The larger the school the less is the disturbance, as it is possible to have the use there of a teacher's room. At the smaller and older schools, only class-rooms are available, and the disturbance is necessarily greater. It has been possible to conduct Medical Inspection in every case on the school premises.

In the case of the smaller schools the accurate measurement of deafness in infants, such as is suggested by the Board's Chief Medical Officer, is a matter of some difficulty. The disturbance of Medical Inspection by the noises of children both at work and play in the immediate vicinity of the room in which the examinations are being conducted, makes the correct estimation of hearing and chest condition a matter of great difficulty, so much so that if accuracy is to be obtained many children have to be drafted to the quiet of the Inspection Clinic at the Council Offices for further inspection.

PARENTS PRESENT AT MEDICAL INSPECTION.

Only 81 parents were present at Medical Inspection last year, a percentage of 8.

For the first time in the history of Medical Inspection in Swinton and Pendlebury there were parents last year who refused Medical Examination of their children. The number happily was

small, but the influence of one objecting parent on other parents who regard Medical Inspection with disfavour, but accept it as a compulsion, is unfortunately considerable. At St. Peter's Girls' School several parents who had come to see their children examined, on hearing that a mother had objected to have her child examined and that her objection was not overruled, immediately refused to have any stripping of their children done, but were willing, even anxious, to have an "exhaustive" examination performed without the undoing of a button or hook.

The majority of parents who attended, however, expressed the greatest sympathy with Medical Inspection, and were glad of the opportunity afforded them of ascertaining the physical condition of their offspring.

EXTENT AND SCOPE OF MEDICAL INSPECTION DURING 1913.

Inspection took place in all the district schools. It has been possible to revisit the schools and secure the inspection of children who were absent at the first inspection.

The grouping of children for inspection purposes was as follows :—

1. Entrants.
2. Leavers.
3. Special Cases.

It was impossible to introduce the examination of a third age group in the time at the officials' disposal. No third age group examination is at present compulsory nor will it be until the Medical Inspection year commencing April 1st, 1915.

The special cases are cases which do not belong to either entrant or leaver groups and which are deemed by teachers or parents to be defective. No extensive use was made by teachers of the facility afforded for the examination of children with such defects as errors of vision, adenoids, anæmia, retardation, etc.

In a general survey of defective children for the purpose of compiling Table III. I found that errors of refraction were exceedingly common in some schools, and that retardation was frequently to be attributed to some physical defect which was remediable. It would therefore be to the advantage both of child and teacher if defective children who are outside the scope of routine examination were presented at Medical Inspection, as special cases.

The work also included the re-examination at school of defective children. A number of children had left before re-examination was possible, but of these some were seen by me in the factories at my certification visits. I was thus enabled to re-inspect and incidentally follow up children beyond school life.

The remaining work undertaken included the important Inspection Clinic work, the "following up" of defects, and the general examinations to ascertain conditions of bodily cleanliness and state of clothing.

The following Table shows the number of children examined in 1913 classified according to age and sex:—

Ages Examined.	Routine Inspection.				Special Inspection.		
	Boys.		Girls.		Boys.		Girls.
3 years.....	49	...	40	.....	1	...	—
4 „	111	...	114	.....	—	...	—
5 „	95	...	103	.....	1	...	1
6 „	36	...	37	.....	5	...	5
7 „ .....	—	...	—	.....	10	...	11
8 „ .....	—	...	—	.....	3	...	1
9 „ .....	—	...	—	.....	—	...	2
10 „ .....	—	...	—	.....	—	...	4
11 „ .....	—	...	—	.....	1	...	2
12 „	132	...	159	.....	—	...	—
13 „	36	...	49	.....	—	...	—
14 „	2	...	—	.....	—	...	—
Totals	455		502		21		26

Arrangements for Co-Relating the School Service with the Public Health Service and for the Prevention of the Spread of Infectious Diseases.

The posts of School Medical Officer and Medical Officer of Health are in Swinton and Pendlebury combined in one appointment. Co-relation between the two services is thereby secured.

Notifications of the notifiable diseases received in the Public Health Department concerning any child of school age or concerning any person in a house where children of school age live, occasion immediate administrative procedure in so far as school attendance is concerned. Parents, teachers and attendance officers receive notices with specific instructions regarding the period of exclusion of affected children and contacts.

A register of both notifiable and non-notifiable infectious and contagious diseases is kept in the School Medical Officer's Department. The information concerning the non-notifiable affections is furnished on special forms by head teachers. The School Nurse visits all cases of measles and pins up instructions printed on cardboard and impresses on the mother or guardian the seriousness of measles and the care which ought to be exercised to prevent any spread of the malady. Incidentally she is in a position to verify the correctness of the information.

Teachers and Attendance Officers are in possession of printed regulations concerning their actions with regard to infectious disease in schools. These regulations define periods of exclusion of affected cases and contacts, both for notifiable and non-notifiable transmissible affections, and include a brief resume of the outstanding features of the commoner infectious maladies.

The school notifications of the non-notifiable infectious diseases are a fairly reliable index of the incidence of such affections in the district. They dealt in 1913 only with the latter half of the year as no form of school notification was instituted previously. In the earlier part of the year measles had been somewhat epidemic in the Moorside District, but during the latter half of the year only 52 cases were notified to the School Medical Officer.

The transmissible disease which had the most marked influence on School Attendance was Mumps, of which 318 notifications were received between June 6th and December 31st representing a loss of at least 1,000 weeks' school attendance. Conjunctivitis and impetigo contagiosa were also prevalent.

There can be no gainsaying that Medical Inspection in this district has brought about a lessened average attendance. Arrangements by which the health and physical condition of the children in the Public Elementary Schools are attended to are varying in character. Any scheme which aims at prevention must embody rigid exclusion of infectious cases of illness, whatever the infection may be, from schools of the ordinary type.

The scheme should also include the remedy of defective sanitary conditions in schools. Want of adequate ventilation, light, cloak room accommodation and neglect of cleanliness in Elementary Schools, are largely instrumental in the spread of infectious and contagious maladies. The progress of an Epidemic of the measles, whooping cough type cannot be stayed if children are crowded together in rooms which provide every necessary condition for the transmission of infection. Moreover children who suffer from conditions other than infectious, such as anæmia, bronchitis, malnutrition, etc., cannot reasonably be forced to attend schools the sanitation of which would be derogatory to their health.

It thus comes about that in Swinton and Pendlebury two conditions which are co-operative have militated against and are militating against good school attendance, i.e., infection and insanitary school buildings. A third factor is operative in no small

degree, i.e., defective home conditions. This it is to be hoped will improve as housing inspection in the district proceeds.

Such considerations must enter into making provision whereby the health and physical condition of school children receives the Authorities' attention.

In the following table will be found classification of the exclusions signed by the School Medical Officer from May to December, 1913. These are over and above the many exclusions for the commoner infectious diseases (scarlet fever, measles, chicken-pox, whooping cough, mumps, etc.) which automatically took place according to regulations :—

Conjunctivitis	...	...	...	...	...	...	134
Impetigo Contagiosa	...	...	...	...	...	...	116
Ringworm	...	...	...	...	...	...	35
Pulmonary Tuberculosis and Suspected Pulmonary Tuberculosis	...	...	...	...	...	...	43
Debility (including Anæmia)	...	...	...	...	...	...	30
Throat Affections	...	...	...	...	...	...	23
Eczema	...	...	...	...	...	...	18
Heart Disease	...	...	...	...	...	...	10
Verminous Conditions	...	...	...	...	...	...	18
Scabies	...	...	...	...	...	...	4
Other Tubercular Affections	...	...	...	...	...	...	7
Miscellaneous	...	...	...	...	..	...	64
Total	...	...	...	...	..	...	502

The remedy for diminished attendance undoubtedly lies, in the provision of better housing, the remedy of insanitary school conditions, and most important of all the provision of an open-air day school whereby the anæmic, the ill-nourished, the bronchitic and the pretubercular and early tubercular, children, may be provided not only with education, but with a restorative and preventative. There are many children at present in this district who are excluded from the ordinary schools for physical and hygienic reasons who could well attend an open-air school, and it really is the duty of the Authority to make provision for such children.

HYGIENIC CONDITION OF THE SCHOOLS.

I have already presented to the Committee somewhat exhaustive reports on the sanitary condition of St. Augustine's and St. Charles' Voluntary Schools and Moorside Council School. These reports have been sent to the managers of each school for their observations. No reply has been received from the managers of St. Charles at the time of writing. The managers of the Moorside Council School have met and considered the School Medical Officer's report and have submitted to the School Management Committee their proposal, which is that as the present school building cannot be adapted to suit the requirements of the Board of Education or the suggestions of the School Medical Officer, it be, with necessary alterations, used as an infant school only, and that a new mixed school capable of accommodating 300 children be built. The School Management Sub-Committee have now submitted the matter to the Building and Sites Committee. The Managers of St. Augustine's School have met and considered the School Medical Officer's report, and although they are not in absolute accord with the opinions expressed in the report and the statements made therein, they are in general agreement that the time has come when work of constructive or reconstructive nature should be undertaken and they have placed the matter in the hands of an architect, to report on the present buildings and give an expression of opinion as to whether they could be so altered as to bring the school into line with present day hygienic requirements or whether the erection of new buildings would be more expedient.

I have not reported to this Committee on any other school as yet, deeming it better to allow the members to concentrate their minds on the three schools already reported on.

I want, however, to say here that there are other schools in the district which will at an early date require the earnest consideration of the Education Committee. I venture to point out in which direction those of the remaining schools, which are unsatisfactory, are defective.

Ventilation.—This defect is very obvious in all the older schools. There is a deficiency in available open window space. But a small portion of such windows as are ventilating, are made to open. Teachers complain much of draughts if even the small window openings are made use of for fresh air supply. These draughts are obviously the result of the smallness of the window openings. The heated and therefore less dense air inside school-rooms has an aspirating effect on the denser outside air which, being aspirated through small openings, is supplied at such a velocity as to cause a draught. The larger the window opening the better, and casement or sash windows fitted with hopper openings which extend the entire breadth of the window, are the best forms of ventilating window.

Lighting.—I should like members of the Committee to examine the excellent lighting arrangements in St. Paul's School, and afterwards investigate the lighting in some of the other schools. Too many windows are so far above the floor level as to be ineffective. Too many windows contain opaque glass. Too many are so small and so disposed as to be quite ineffective. The window space should never be less than one-sixth of the floor area. If it were equal to the floor area, so much the better. In any new school which will be built in the district it would be well if those responsible for the structure were to plan as much on the open-air principle as possible. The School Medical Officer might advantageously be consulted as to the hygienic features of the building.

Heating.—The cold weather in the early part of January elicited the fact that in the majority of the schools the heating accommodation was inadequate to cope with the very much lowered temperature. The result was that children were being asked to

attend class rooms, the morning temperature of which more nearly approximated 40° F. than 50° F. In the presence of an unpolluted atmosphere and plenty of woollen clothing, such a temperature would not be amiss, but where windows are shut in an endeavour to obtain warmth, and where infants are often clad in the scantiest of cotton garments, such a class room temperature is a menace even to the healthy, by enfeebling the vitality, and is a positive danger to the bronchitic subject.

No alteration to suit the lowered temperature in the stoking operations, may have accounted for the low temperature in some schools, but I know of at least one instance in which the greatest effort was unattended by even moderately satisfactory result. The remodelling of the heating apparatus in this instance is now under consideration.

Cloak Room Accommodation and Lavatory Accommodation.—I am sorry to have to report most unfavourably on cloak room and lavatory accommodation as general features in the older schools. In some buildings clothing is huddled together on hooks which are close together and the exclusion of drying power would seem to be quite a feature of these older cloak rooms. Washing accommodation is of the most primitive nature—where it does exist. The results of bad cloak rooms and lack of proper washing accommodation, which, of course, implies the lack of reasonably clean towels, are often to be measured in increased verminous infection and the more rapid spread of infectious eye inflammations and contagious skin diseases. In some of the cloak rooms I have inspected, the narrowness of the accommodation has led to the sweeping of coats and hats to the floor in one's passage between the rows of pegs.

Playgrounds.—Those which are unpaved or asphalted are potent sources of schoolroom dirt. In several playgrounds, I saw the surface after a severe frost, churned up into a mass of the consistency of fresh mortar.

The cleansing of school premises might receive the attention of managers. Dust is at all times a harmful product, and every endeavour should be made to prevent its accumulation. In schools where no effectual means, and few of the older means are effectual, are in use to allay the clouds of dust which accompany the application of the broom, dust frequently rich in germ life, accumulates on ridges and in interstices. As time passes each floor sweeping operation adds its quota of dust to that already accumulated, and the room sooner or later becomes unhealthy from the accumulation of dust alone. There are articles on the market for allaying dust which are effective for that purpose, and at the same time are germicides and deoderisers. Their use has become common in institutions and public buildings.

The frequent spraying of class room walls with germicidal solutions, combined with the vigorous and frequent application of soap and water, adds greatly to a school's healthiness, but the absence of proper ventilation and the exclusion of sunlight must inevitably be attended by physical disability, and I would like to again point out that the general hygienic condition of several of the district schools would readily account for the prevalence of transmissible affections such as Impetigo, Mumps and Purulent Conjunctivitis, with consequent loss of attendance, and therefore loss of grant.

FACTS DISCLOSED AT MEDICAL INSPECTION.

Complete numerical tabulation of the findings at Medical Inspection will be found in Tables II. and IV.

CLOTHING.

The information that 30 per cent. of the elementary school children in the district are defectively clad will no doubt come as a surprise to many. The estimation is probably an under-estimation, for many children whose clothing could be improved upon in

cleanliness and state of repair, were classified as satisfactory on account of their favourable state in comparison with those who were classified as unsatisfactory. The ragged and dirty state of many of the children in some of the schools suggested neglect or extreme poverty. As extreme poverty of the unavoidable type does not exist to any appreciable extent in this neighbourhood, culpable neglect and indifference, combined with defective housing, were the probable causative factors.

BOOTS.

Only one-third of the children who had defective clothing had defective foot gear. This may seem surprising until one remembers that Lancashire children wear clogs. I have nothing but praise for the clog as foot gear for working class children. Clogs are cheap, durable, and comfortable. As showing the advantage of clogs over boots, I may state that in areas in which I have served, previous to my appointment by this Authority, I found that the percentage of defective foot gear was usually greater than that of clothing.

NUTRITION.

6.6 per cent of the children examined were below a normal state of nutrition. Only $\frac{1}{2}$ per cent. had really bad nutrition. The estimation of nutrition was based on no formula, neither was it based on weight and height alone, but was an estimation of the child's general tissue condition when stripped. I am convinced that most of the children who are of defective nutrition suffer often not from lack of food in quantity but from physical causes apart from dietary. Lack of food would not appear to be a feature in prominence in this district, but injudicious feeding is much in evidence, with consequent disability for mental and physical exertion. I think it is disastrous to confine the feeding of children by Education Authorities to those from homes the economic circumstances of which would appear to be critical. Recovery of cost is possible, and many children from economically sound homes suffer from injudicious and irregular feeding, and are unfitted for any mental pressure. At the same time I admit the difficulty of choice.

DEFECTIVE TEETH.

Only 22 per cent. of the children examined had sound teeth. 58 per cent. had carious teeth ranging in number from 1 to 4, and 19 per cent. had more than 4 teeth decayed. It will thus be seen that a large number of elementary school children are in need of dental treatment. No physical defect is more far-reaching in the production of disability than carious teeth. Dyspepsia, auto-intoxication, anæmia, enlarged tonsils, enlarged glands and tuberculosis are but some of the maladies which can often be traced to carious teeth.

In all the children examined in this area only one case in which conservative dentistry had been practised was found. It will therefore be apparent that the limited amount of dentistry practised on school children belonging to this district is confined to extractions. Limited is said advisedly, as no defect requires more following up, and no defect remains less treated after following up, than carious teeth.

If I were asked to name the form of treatment for physically defective school children the Education Committee ought to consider most seriously, I should say without hesitation dentistry. A school dentist working for two half days a week, and confining his attentions to the 6, 7 and 8 age groups, would accomplish remedial work the advantage of which would be out of all proportion to the cost. The Medical Treatment Act gives power to recover cost of treatment. Remembering that half the cost of medical inspection will in future be paid by the Central Authority, it would be possible to formulate a scheme of conservative dentistry for the Swinton and Pendlebury school children which need have no prohibition as far as cost is concerned. I earnestly ask the Committee to give this matter their fullest consideration.

HEART DISEASE.

In connection with heart disease, no organic defects of a grave nature, that is to say, in which compensation had not been established, were found at routine inspection.

Two cases of mitral disease were found in female entrants, and one case of mitral disease was found in a male entrant. One case of cardiac dilatation was found in a female leaver, and one case of mitral disease was found in a male leaver. None of these cases were of any urgency, all being without subjective symptoms.

Cases of grave heart affection, however, came under the notice of the School Medical Officer at the Inspection Clinic. At present six children are excluded on account of urgent organic heart disease. All are cases of mitral disease and all have subjective and objective symptoms of serious import. Four are girls and two are boys. With the possible exception of one case, in which there is marked dilatation and anasarca, these cases excluded from ordinary day school would benefit greatly from open-air residential school conditions. Each case has been seen repeatedly by the School Medical Officer.

DISEASES OF LUNGS.

Diseases of the lungs are dealt with under tuberculosis.

SKIN DISEASES.

Ringworm of the Head. Only three cases of scalp ringworm were found at routine inspection. The affection is not very prevalent in this district. However, at the present time 25 children are excluded for this affection, and are periodically examined at the Inspection Clinic. Since April, 1913, when I commenced my duties here, down to the present time a total of 43 cases of ringworm of the scalp have come under my observation. Eighteen of these cases have returned to school. The total number of attendances lost by the 18 children who have returned to school was 2,226. Each child therefore lost on an average 123 attendances, or in other words, was excluded from school for a period of 24 weeks. Of the 25 children who are still excluded from school no definite statement can be made of the loss the child and the Authority is likely to sustain, as some of the affected have contracted the malady recently, and others have old-standing and intractable forms of the affection. Of the 18 cases already mentioned, two received X-Ray treatment.

The treatment of ringworm in this district is similar to the treatment in most other districts. It consists more often of a visit to the chemist than to the doctor, and whatever be the nostrum provided for treatment it is expected by the parent that the mere application will produce the desired result. It need scarcely be said that expectations are not fulfilled, and the remedy is soon supplanted by other remedies equally inefficacious, and sooner or later the spreading ringworm gets no treatment. It will therefore be obvious that the continual observation which can be procured at an Inspection Clinic is necessary for ringworm cases in order to ensure that proper measures are being taken to shorten as much as possible the child's exclusion from school. No child returns to school without having previously been examined by the School Medical Officer, and diagnosis of ringworm and freedom therefrom are verified by microscopic examination.

TUBERCULOSIS.

At routine medical inspection seven cases of definite pulmonary tuberculosis and four cases of suspicious pulmonary tuberculosis were discovered.

Two cases of non-pulmonary tuberculosis, both of the skin, were also discovered at routine inspection.

The results as far as the routine cases are concerned have been as follows :—

SUSPICIOUS CASES.

One proved to be a definite case. One exhibited no signs or symptoms at subsequent examinations.

DEFINITE CASES.

One boy excluded from school has exceeded school age. His symptoms are marked. One boy who was at no time excluded from school has greatly improved. One girl's condition is stationary. She has not been excluded from school. Two boys and one girl are decidedly worse, and are excluded from school.

NON-PULMONARY CASES.

Both are skin cases, and remain stationary. They heal to a certain extent but relapse.

Besides the foregoing cases discovered at routine inspection, the following definite cases of pulmonary tuberculosis have come under the observation of the School Medical Officer :—

Girls.

15

Boys.

17

Of the 15 girls,

6 who were excluded on discovery have been readmitted after treatment.

9 are still excluded from school and are unimproved or are definitely worse.

Of the 17 boys,

1 has been admitted to the Workhouse Infirmary.

3 have returned to school after exclusion.

1 is improving, but is not sufficiently well for ordinary day school.

12 who are unimproved or have developed the disease still further are excluded from school attendance.

Four cases of tubercular glands, not discovered at routine inspection, have also been under the School Medical Officer's observation. They have all returned to school much improved after exclusion. Three of the cases were caseating with secondary pyogenic invasion.

Contacts have been examined and have naturally furnished some positive results.

Besides the definite cases many cases have from time to time been examined who if not tubercular could be classified as pre tubercular in as much as they were, at the time of examination, favourable soil for the development of tubercular affections.

The work of following up, the re-examination of definite cases, and the examination of contacts, was accomplished at the Inspection Clinic. Saturday mornings were devoted to examinations in connection with tuberculosis only. Many of the cases were seen repeatedly, and every definite case was seen at regular intervals.

I am convinced that the incidence of pulmonary tuberculosis in the district school children is higher than would appear from the definitely known cases. As it is the incidence of 8 per 1,000 of the school population. This is a high incidence, and calls for some action preventative and prophylactic on the part of the Education Authority. It would be defeating the object of preventive medicine if any child who exhibited symptoms, however slight, of pulmonary tuberculosis, or who was even pretubercular, were allowed to continue in attendance at some of the schools in the district, considering the defective hygiene of the buildings. The low and decreasing average attendance, with the serious educational interests and the loss of grant involved therein, is due in great measure to invalidity, the result of a combination of circumstances in which dilapidated and dirty homes and defectively ventilated schools, figure. Many of the children who are excluded are suitable subjects for open air school education, and many of the children who are at present attending school should, at least for a time, have the advantage of open air school conditions. There is no sounder investment which an Education Authority could effect than the erection of an open air school. Such a structure is a powerful preventive machine, and gives security against future invalidity.

RICKETS.

Four per cent. of all the children had evidences of rickets. Three per cent. of males had evidences of severe rickets. In connection with rickets it is pleasing to note that four osteotomy operations have been performed as a result of medical inspection, and the question might readily be asked, considering the very obvious deformity in each case, why had operation been deferred until medical inspection proposed it. The answer I fear would not altogether flatter parental solicitude.

Rickets is at all times associated with a combination of industrialism, insanitary conditions, and defective feeding. It may have been that in times past those causes were more patent in Pendlebury than they are to-day, judging from the deformity one sees in the adult and adolescent population. Deficiency of fat would appear to characterise the feeding of infants wherever the bottle is in use, and ignorance of fat substitutes, when the price of cream is prohibitive, is one proof of how essential it is that future mothers should have comprehensive instruction in infant rearing. The employment of married and pregnant women in mills obtains to quite an inconsiderable extent in this area, and cannot be associated with the incidence of rickets.

VERMINOUS CONDITIONS.

It would appear that in the endeavour to remedy the above conditions lies no small proportion of the work of a Medical Inspection Department. The method adopted in this area in the past has been a first examination by the Nurse of every school child in attendance at the elementary schools, followed by a second examination of all children who were found to be in need of remedy at the first examination. At each examination first and second warning notices were issued to parents (each warning notice contains instruction in the easiest and most effective method of cleansing). Further procedure in the past has been the exclusion of children the cleanliness of whom was unimproved as the result of the first and second notices.

The Council have now in the process of erection a cleansing station which will be at the disposal of the Education Committee, so that further procedure after the second warning, or in cases where necessity demands more prompt action, will now be the service of Statutory Notices under Sec. 122 of the Children's Act, to be followed by cleansing where needful.

Teachers and Attendance Officers are encouraged to send to the Council Offices for the School Medical Officer's observation all verminous children, the condition of whom is so urgent as to call for immediate action.

TABLE OF VERMINOUS CONDITIONS.

		1st Examination.						2nd Examination.								
		Clean	%	Nits.	%	Vermin	%	Body Vermin	%	Clean	%	Nits.	%	Vermin	%	Body Vermin
St. Augustine's ...	{ Girls...	113	57.6	77	39.2	6	3.0	4	2.0	17	32.6	26	50.0	9	17.3	4
	{ Boys...	234	96.2	4	1.6	5	2.0	1	.5	8	...	...	...	...	...	1
	{ Infants	136	80.0	24	14.1	10	5.8	...	...	17	70.8	4	16.6	3	12.5	...
St. Joseph's ...	{ Girls...	61	67.0	20	21.9	10	10.9	10	10.9	12	50.0	10	41.6	2	8.3	8
	{ Boys...	86	95.5	3	3.3	1	1.1	4	4.4	4	...	...	...	...	...	3
	{ Infants	53	96.3	...	...	2	3.6	...	...	2	...	...	...	...	...	...
St. Peter's ..	{ Girls...	269	83.2	49	15.1	5	1.5	...	...	9	39.1	13	56.5	1	4.3	...
	{ Boys...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Infants	270	93.1	16	5.5	4	1.3	2	1.7	5	35.7	7	50.0	2	14.2	...
Christ Church ...	{ Girls...	89	62.2	49	34.2	5	3.4	...	...	19	47.5	20	50.0	1	2.5	...
	{ Boys...	186	98.9	1	.5	1	.5	...	...	2	...	...	...	...	...	...
	{ Infants	100	83.3	16	13.3	4	3.3	1	.8	6	6.0	3	3.0	1	1.0	1
St. Charles's ...	{ Girls...	15	62.5	7	29.1	1	4.1	2	8.3	3	37.5	5	62.5	...	...	1
	{ Boys...	16	...	...	...	...	...	1	6.2	...	...	...	...	...	...	1
	{ Infants	24	88.8	3	11.1	...	...	1	4.1	2	...	...	...	...	...	...
St. Mary's ...	{ Girls...	94	64.8	41	28.2	10	6.9	3	2.0	23	50.0	19	41.3	4	8.6	2
	{ Boys...	163	96.4	5	2.9	1	.5	7	4.1	6	...	...	...	...	...	7
	{ Infants	101	84.1	17	14.1	2	1.6	2	2.0	...	...	8	8.0	2	2.0	1
Cromwell Road...	{ Girls...	115	52.9	88	40.5	14	6.4	6	2.7	23	41.0	28	50.0	5	8.9	6
	{ Boys...	276	98.9	2	.7	1	.3	2	.7	14	...	...	...	...	...	2
	{ Infants	141	90.9	12	7.7	2	1.2	1	.6	1	12.5	4	50.0	3	37.5	1
Moorside Council {	Girls...	70	93.3	4	5.3	1	1.3	...	...	5	...	...	...	...	...	...
	Infants	44	89.7	3	6.1	2	4.0	...	...	5	...	...	...	...	...	...
Holy Rood ...	{ Girls...	94	88.6	10	9.4	2	1.8	...	...	2	25.0	4	50.0	2	25.0	...
	{ Infants	70	94.5	3	4.0	1	1.3	...	...	2	50.0	1	25.0	1	25.0	...
St. Paul's ...	Infants	68	97.1	...	...	2	2.8	...	...	...	...	...	...	...	...	...
St. Stephen's ...	Infants	275	93.5	16	5.4	3	1.0	...	...	0	0	6	85.7	1	14.2	...

Holy Rood Boys, Moorside Council Boys, and St. Peter's Boys were clean without exception.
 The second examination refers to re-examination of cases found to be decidedly verminous at the first examination.

In the accompanying Table will be found the conditions found at each school in the district. Second examinations, as tabulated, are those conducted on cases in which first warning notices had been issued.

It will be observed that in some schools the proportion of verminous children is high. It must be understood that the children in the column headed "Vermin" were those on whom live vermin were seen at the time of examination, but it by no means implies that they were the only children with live pediculi there.

The differences between the proportions of verminous children found at routine medical examination and at examination for general cleanliness by the Nurse is a measure of the activities of parents when given notice of intended inspection. At routine inspection 1.05 of the entrants and 1.2 of the leavers had live vermin. Nurse Walker tells me that on the first day of her examination at any particular school she invariably finds the largest proportion of verminous children, and on subsequent days at the same school she finds abundant evidence of cleansing activities.

I think it will be admitted by all that it is unfair to expect clean children to attend a school in which verminous children are allowed to attend without controlling measures. Clean children frequently become vermin infested by contact with dirty children, and the resentment of the parents of such children when served with a notice can be understood, although the service of notice is very necessary.

TABLE I.

NUMBER OF CHILDREN INSPECTED 1st JANUARY, 1913 TO 31st DECEMBER, 1913.

A. "CODE" GROUPS.

	Entrants.					Leavers.				Grand Total.
	Age 3.	Age 4.	Age 5.	Age 6.	Total.	Age 12.	Age 13.	Age 14.	Total.	
Boys ...	43	111	95	36	285	132	36	2	170	449
Girls ..	40	114	103	37	294	159	49	..	208	502
Totals ..	83	225	198	73	579	291	85	2	378	951

115

B. GROUPS OTHER THAN "CODE."

	Special Cases.	Re-Examinations.
Boys ...	21	109
Girls ...	26	90
Totals ...	47	199

TABLE II.

Condition.		Entrants.				Leavers.				Totals.				Special Cases.		
		M.	F.	Total	%	M.	F.	Total	%	M.	F.	Total	%	M.	F.	Total
Total Inspected—		285	294	579		170	208	378		455	502	957		21	26	47
Clothing ..	{ Satisfactory ..	187	208	395	68·2	118	149	267	70·6	305	357	662	69·1	..	..	..
	{ Unsatisfactory ..	98	86	184	31·7	52	59	111	29·3	149	145	295	30·8	..	..	..
Footgear ..	{ Satisfactory ..	255	267	522	90·1	150	184	334	88·3	405	451	856	89·4	..	..	..
	{ Unsatisfactory ..	30	27	57	9·8	20	24	44	11·6	50	51	101	10·5	..	..	..
Cleanliness of Head ..	{ Clean ..	270	201	471	81·3	157	134	291	76·9	427	335	762	79·6	..	..	..
	{ <i>Dirty nits</i> ..	12	87	99	17·0	12	72	84	22·2	24	159	183	19·1	..	..	..
	{ Pediculi ..	3	6	9	1·5	1	2	3	·7	4	8	12	1·2	..	..	..
Cleanliness of Body ..	{ Clean ..	222	238	460	79·4	137	177	314	83·	359	415	774	80·8	..	..	..
	{ <i>Nits Dirty</i> ..	63	54	117	20·2	32	31	63	16·6	95	85	180	18·8	..	..	..
	{ Pediculi ..	..	2	2	·3	1	..	1	·2	1	2	3	·3	..	..	..
Nutrition ..	{ Normal ..	273	281	554	95·6	152	182	334	88·3	425	463	888	92·7	..	..	..
	{ Below Normal ..	12	11	23	4·0	17	24	41	10·8	29	35	64	6·6	1	..	1
	{ Bad ..	..	2	2	·3	1	2	3	·7	1	4	5	·5	..	1	1
Nose and Throat ..	{ No Defect ..	216	232	448	77·3	139	169	308	81·4	355	401	756	77·8	..	..	..
	{ Mouth Breathers ..	10	11	21	3·6	5	3	8	2·1	15	14	29	3·0	..	..	..
	{ Tonsils + ..	35	32	67	11·5	17	25	42	11·1	52	57	109	11·3	1	1	2
	{ Tonsils ++ ..	8	8	16	2·5	1	3	4	1·0	9	11	20	2·0	1	1	2
	{ Adenoids ..	16	11	27	4·6	8	8	16	4·2	24	19	43	4·4	1	1	2
External Eye Disease ..	{ No Defect ..	261	281	542	93·6	163	200	363	96·0	424	481	905	94·5	..	..	..
	{ Blepharitis ..	14	7	21	3·6	2	3	5	1·3	16	10	26	2·7	..	..	..
	{ Conjunctivitis ..	8	4	12	2·0	1	1	2	·5	9	5	14	1·4	..	..	..
	{ Corneal Opacities ..	..	2	2	·3	1	3	4	1·0	1	5	6	·6	..	..	..
	{ Other Disease ..	2	..	2	·3	3	1	4	1·0	5	1	6	·6	1	2	3
Ear Disease ..	{ No Disease ..	272	283	555	95·8	146	180	326	86·2	418	463	881	92·0	..	..	..
	{ Deafness, R. ..	4	5	9	1·5	8	8	16	4·2	12	13	25	2·6	1	1	2
	{ Deafness, L. ..	4	5	9	1·5	6	8	14	3·7	10	13	23	2·4	1	1	2
	{ Otorrhœa, R. ..	2	..	2	·3	4	6	10	2·6	6	6	12	1·2	1	1	2
	{ Otorrhœa, L. ..	1	1	2	·3	3	6	9	2·3	4	7	11	1·1	1	1	2
	{ Other Disease ..	2	..	2	·3	3	..	3	·7	5	..	5	·5	..	..	..
Teeth ..	{ Sound ..	82	93	175	30·2	21	23	44	11·6	103	116	219	22·8	..	..	..
	{ Less than 4 decayed ..	137	139	276	47·6	122	158	280	74·0	259	297	556	58·0	..	..	..
	{ More than 4 decayed ..	66	62	128	22·1	27	27	54	14·2	93	89	182	19·0	..	..	..
Heart and Circulation ..	{ No Disease ..	281	289	570	98·4	169	204	373	98·6	450	493	943	98·5	..	..	..
	{ Organic Disease ..	1	2	3	·5	..	2	2	·5	1	4	5	·5	..	..	..
	{ Functional Disease ..	1	1	2	·3	..	..	..	..	1	1	2	·2	..	..	..
	{ Anæmia ..	2	2	4	·6	1	2	3	·7	3	4	7	·7	..	..	..
	{ Other Defect ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lungs ..	{ No Disease ..	275	282	557	96·1	158	205	363	96·	433	487	920	96·1	..	..	..
	{ Bronchitis and Bronchial Catarrh ..	9	12	21	3·6	4	1	5	1·3	13	13	26	2·7	..	..	..
	{ Tuberculosis ..	1	..	1	·1	4	2	6	1·5	5	2	7	·7	..	1	1
	{ Suspicious Tuberculosis ..	..	..	..	..	4	..	4	1·0	4	..	4	·4	..	..	..
	{ Other Disease ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE II.—*Continued.*

Condition.		Entrants.				Leavers.				Totals.				Special Cases.		
		M.	F.	Total	%	M.	F.	Total	%	M.	F.	Total	%	M.	F.	Total
Total Inspected—		285	294	579		170	208	378		455	502	957		21	26	47
Nervous System	No Disease ..	285	292	577	99.6	169	207	376	99.4	454	499	953	99.5	..	..	..
	Epilepsy ..	..	1	1	.1	..	1	1	.2	..	2	2	.2	1	..	1
	Chorea ..	..	..	..	..	1	..	1	.2	1	..	1	.1	..	..	..
	Other Disease ..	..	1	1	.1	..	..	..	..	..	1	1	.1	..	1	1
Skin	No Disease ..	271	283	554	95.6	167	202	369	97.6	438	485	923	96.4	..	..	..
	Ringworm, Head ..	2	1	3	.5	..	..	..	..	2	1	3	.3	..	3	3
	Ringworm, Body ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Impetigo ..	1	4	5	.8	..	..	..	..	1	4	5	.5	1	..	1
	Scabies ..	1	..	1	.1	..	..	..	..	1	..	1	.1	..	..	..
	Other Disease ..	10	6	16	2.7	3	6	9	2.3	13	12	25	2.6	..	1	1
Rickets	No Disease ..	265	284	549	94.8	165	204	369	97.6	430	488	918	95.9	..	..	..
	Slight.. ..	8	..	8	1.3	2	..	2	.5	10	..	10	1.0	..	..	..
	Marked ..	12	10	22	3.7	3	4	7	1.8	15	14	29	3.0	..	..	..
Deformity	No Deformity ..	262	279	541	93.4	164	202	366	96.8	426	481	907	94.7	..	..	..
	Deformity Present..	23	15	38	6.5	6	6	12	3.1	29	21	50	5.2	2	4	6
Non-Pulmonary Tuberculosis..	No Disease ..	283	294	577	99.6	170	208	378	..	453	502	955	99.7	..	..	..
	Glandular ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Bones and Joints ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Other Disease ..	2	..	2	.3	..	..	..	..	2	..	2	.2	1	..	1
Speech	No Defect ..	279	289	568	98.1	163	206	369	97.6	442	495	937	97.9	..	..	..
	Defective ..	6	5	11	1.8	7	2	9	2.3	13	7	20	2.0	1	..	1
Mental Condition..	Normal ..	..	..	..	..	143	178	321	85.1	143	178	321	85.1	..	..	..
	Dull ..	..	..	..	..	26	30	56	14.8	26	30	56	14.8	2	..	2
	Defective ..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	3
Vision	Normal ..	..	..	..	..	128	117	245	69.2	..	..	..	..	..	..	..
	6/6 .. R. ..	..	..	..	..	6	8	14	3.9	..	..	..	..	..	..	..
	6/6 .. L. ..	..	..	..	..	3	12	15	4.2	..	..	..	..	..	..	..
	6/9 .. R. ..	..	..	..	..	8	14	22	6.2	..	..	..	..	..	..	..
	6/9 .. L. ..	..	..	..	..	10	15	25	7.0	..	..	..	..	..	..	..
	6/12 .. R. ..	..	..	..	..	5	12	17	4.8	..	..	..	..	..	..	..
	6/12 .. L. ..	..	..	..	..	10	14	24	6.7	..	..	..	..	..	..	..
	6/18 .. R. ..	..	..	..	..	8	13	21	5.9	..	..	..	..	..	..	..
	6/18 .. L. ..	..	..	..	..	5	21	26	7.3	..	..	..	..	..	..	..
	6/24 .. R. ..	..	..	..	..	3	9	12	3.3	..	..	..	..	..	..	..
	6/24 .. L. ..	..	..	..	..	1	7	8	2.2	..	..	..	..	..	..	..
	6/36 .. R. ..	..	..	..	..	3	7	10	2.8	..	..	..	..	..	..	..
	6/36 .. L. ..	..	..	..	..	1	5	6	1.6	..	..	..	..	..	..	..
	6/60 .. R. ..	..	..	..	..	5	4	9	2.5	..	..	..	..	..	..	..
	6/60 .. L. ..	..	..	..	..	6	1	7	1.9	..	..	..	..	..	..	..
	"Squint" ..	7	7	14	2.4	4	4	8	2.1	11	11	22	5.8	..	..	..

TABLE III.—NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

			Boys.	Girls.	Total.	
Blind (including partially blind).			Attending Public Elementary Schools	9	4	13
			Attending Certified Schools for the Blind	1	1	2
			Not at School	2	2
Deaf and Dumb (including partially deaf).			Attending Public Elementary Schools	11	17	28
			Attending Certified Schools for the Deaf	2	...	2
			Not at School
Mentally Deficient.	Feeble Minded.	Attending Public Elementary Schools	13	5	18	
		Attending Certified Schools for Mentally Defective Children	...	...	...
		Not at School	4	1	5	
	Imbeciles.	At School ... ..	...	...	...
Not at School ... ..		...	1	1	
	Idiots.	...	...	...	...
Epileptics.			Attending Public Elementary Schools	3	4	7
			Attending Certified Schools for Epileptics
			Not at School	1	1
Physically Defective.	Pulmonary Tuberculosis.	Attending Public Elementary Schools	5	5	10	
		Attending Certified Schools for Physically Defective Children	...	...	...
		Not at School	17	11	28	
	Other forms of Tuberculosis.	Attending Public Elementary Schools	5	6	11	
		Attending Certified Schools for Physically Defective Children	...	...	...
		Not at School	1	1	2	
	Cripples other than Tubercular.	Attending Public Elementary Schools	7	7	14	
		Attending Certified Schools for Physically Defective Children	...	...	...
		Not at School	55	13	18	
Dull or Backward.*			Retarded 2 Years	21	22	43
			Retarded 3 Years	7	1	8

* Judged according to Age and Standard.

SPECIAL CASES WITH DEFECTS.

Age.	Department.	Number Examined.	Squint.	Vision Defective.		Deafness and Discharging Ears.	Adenoids and Enlarged Tonsils.	Other Defects.	No Defect Examined.	Total Number of Defects Examined.
				Slight Defect.	Great Defect.					
Age 3 years.	Boys	1	...	...	...	...	...	1	...	1
	Girls	...	...	...	...	...	...	...	...	...
Age 5 years.	Boys	1	..	...	...	...	...	1	...	1
	Girls	1	1	...	...	...	...	...	...	1
Age 6 years.	Boys	5	...	...	...	1	1	4	...	6
	Girls	5	1	1	...	...	...	3	...	5
Age 7 years.	Boys	10	1	...	1	...	...	7	1	9
	Girls	11	...	...	..	...	1	8	2	9
Age 8 years.	Boys	3	...	...	...	...	...	5	...	5
	Girls	1	...	...	...	...	...	...	1	...
Age 9 years.	Boys	...	...	...	...	...	...	...	...	...
	Girls	2	..	...	...	...	...	2	...	2
Age 10 years.	Boys	...	...	...	...	...	...	...	...	...
	Girls	4	...	1..	...	1	1	5	...	7
Age 11 years.	Boys	1	...	...	...	...	...	...	1	...
	Girls	2	...	..	...	...	...	3	...	3
Totals...	Boys	21	1	...	1	1	1	18	2	22
	Girls	26	2	1	...	1	2	21	3	27
Total ...		47	3	1	1	2	3	39	5	49

HEIGHT IN CENTIMETERS.

School.	Ages.							
	5 Years.		6 Years.		12 Years.		13 Years.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
St. Peter's	102·2	92·8	...	104·5	139·8	138·6	139·4	148·4
St. Augustine's ...	104·	99·5	110·1	107·2	136·8	134·2	132·5	141·3
Christ Church ...	104·2	99·2	104·2	111·5	137·3	136·	149·	139·8
Moorside Council ...	103·6	105·2	109·6	...	133·	134·9	137·2	...
Cromwell Road ...	104·3	103·2	103·7	111·5	135·9	137·7	138·6	143·
St. Joseph's	101·	96·6	...	103·	138·7	147·8	137·	147·8
St. Paul's	102·8	101·3	104·6	...	...	...	...	...
St. Stephen's ...	101·9	101·4	109·	110·4	...	...	...	...
St. Mary's	99·2	99·5	101·5	101·2	134·4	132·3	142·6	137·9
St. Charles's ...	...	100·3	108·	...	...	138·	...	...
Holy Rood	104·	106·1	...	105·7	140·	139·	149·	145·

WEIGHT IN KILOGRAMS.

St. Peter's	16·8	15·8	...	17·2	32·8	31·1	33·7	34·9
St. Augustine's ...	17·3	16·3	19·8	18·1	32·5	32·7	30·6	34·8
Christ Church ...	17·6	16·3	17·8	16·1	31·4	31·5	42·	34·9
Moorside Council ...	16·6	17·2	18·4	...	28·5	30·8	33·	...
Cromwell Road ...	17·8	17·1	18·8	18·3	31·5	32·5	30·4	35·9
St. Joseph's	16·9	15·6	...	16·	33·9	41·	30·	41·
St. Paul's	17·3	16·3	18·9	...	...	...	...	...
St. Stephen's ...	18·2	17·9	20·1	19·9	...	...	..	...
St. Mary's	16·9	17·	17·3	15·6	30·8	28·5	36·5	33·5
St. Charles's ...	...	16·4	20·8	...	...	29·7	...	...
Holy Rood	18·	17·8	...	17·4	33·4	34·8	36·6	39·2

DEFECTS ARRANGED ACCORDING TO SCHOOLS.

[illegible]

1887-1888

General					Particulars				
No.	Date	Particulars	Debit	Credit	No.	Date	Particulars	Debit	Credit
1	Jan 1	Balance		100.00	1	Jan 1	Balance		100.00
2	Jan 15	Wages	5.00		2	Jan 15	Wages	5.00	
3	Jan 20	Food	3.00		3	Jan 20	Food	3.00	
4	Jan 25	Medical	2.00		4	Jan 25	Medical	2.00	
5	Jan 30	Transport	4.00		5	Jan 30	Transport	4.00	
6	Feb 5	Wages	6.00		6	Feb 5	Wages	6.00	
7	Feb 10	Food	3.50		7	Feb 10	Food	3.50	
8	Feb 15	Medical	2.50		8	Feb 15	Medical	2.50	
9	Feb 20	Transport	4.50		9	Feb 20	Transport	4.50	
10	Feb 25	Wages	7.00		10	Feb 25	Wages	7.00	
11	Feb 28	Food	4.00		11	Feb 28	Food	4.00	
12	Mar 5	Medical	3.00		12	Mar 5	Medical	3.00	
13	Mar 10	Transport	5.00		13	Mar 10	Transport	5.00	
14	Mar 15	Wages	8.00		14	Mar 15	Wages	8.00	
15	Mar 20	Food	4.50		15	Mar 20	Food	4.50	
16	Mar 25	Medical	3.50		16	Mar 25	Medical	3.50	
17	Mar 30	Transport	5.50		17	Mar 30	Transport	5.50	
18	Apr 5	Wages	9.00		18	Apr 5	Wages	9.00	
19	Apr 10	Food	5.00		19	Apr 10	Food	5.00	
20	Apr 15	Medical	4.00		20	Apr 15	Medical	4.00	
21	Apr 20	Transport	6.00		21	Apr 20	Transport	6.00	
22	Apr 25	Wages	10.00		22	Apr 25	Wages	10.00	
23	Apr 30	Food	5.50		23	Apr 30	Food	5.50	
24	May 5	Medical	4.50		24	May 5	Medical	4.50	
25	May 10	Transport	6.50		25	May 10	Transport	6.50	
26	May 15	Wages	11.00		26	May 15	Wages	11.00	
27	May 20	Food	6.00		27	May 20	Food	6.00	
28	May 25	Medical	5.00		28	May 25	Medical	5.00	
29	May 30	Transport	7.00		29	May 30	Transport	7.00	
30	Jun 5	Wages	12.00		30	Jun 5	Wages	12.00	
31	Jun 10	Food	6.50		31	Jun 10	Food	6.50	
32	Jun 15	Medical	5.50		32	Jun 15	Medical	5.50	
33	Jun 20	Transport	7.50		33	Jun 20	Transport	7.50	
34	Jun 25	Wages	13.00		34	Jun 25	Wages	13.00	
35	Jun 30	Food	7.00		35	Jun 30	Food	7.00	
36	Jul 5	Medical	6.00		36	Jul 5	Medical	6.00	
37	Jul 10	Transport	8.00		37	Jul 10	Transport	8.00	
38	Jul 15	Wages	14.00		38	Jul 15	Wages	14.00	
39	Jul 20	Food	7.50		39	Jul 20	Food	7.50	
40	Jul 25	Medical	6.50		40	Jul 25	Medical	6.50	
41	Jul 30	Transport	8.50		41	Jul 30	Transport	8.50	
42	Aug 5	Wages	15.00		42	Aug 5	Wages	15.00	
43	Aug 10	Food	8.00		43	Aug 10	Food	8.00	
44	Aug 15	Medical	7.00		44	Aug 15	Medical	7.00	
45	Aug 20	Transport	9.00		45	Aug 20	Transport	9.00	
46	Aug 25	Wages	16.00		46	Aug 25	Wages	16.00	
47	Aug 30	Food	8.50		47	Aug 30	Food	8.50	
48	Sep 5	Medical	7.50		48	Sep 5	Medical	7.50	
49	Sep 10	Transport	9.50		49	Sep 10	Transport	9.50	
50	Sep 15	Wages	17.00		50	Sep 15	Wages	17.00	
51	Sep 20	Food	9.00		51	Sep 20	Food	9.00	
52	Sep 25	Medical	8.00		52	Sep 25	Medical	8.00	
53	Sep 30	Transport	10.00		53	Sep 30	Transport	10.00	
54	Oct 5	Wages	18.00		54	Oct 5	Wages	18.00	
55	Oct 10	Food	9.50		55	Oct 10	Food	9.50	
56	Oct 15	Medical	8.50		56	Oct 15	Medical	8.50	
57	Oct 20	Transport	10.50		57	Oct 20	Transport	10.50	
58	Oct 25	Wages	19.00		58	Oct 25	Wages	19.00	
59	Oct 30	Food	10.00		59	Oct 30	Food	10.00	
60	Nov 5	Medical	9.00		60	Nov 5	Medical	9.00	
61	Nov 10	Transport	11.00		61	Nov 10	Transport	11.00	
62	Nov 15	Wages	20.00		62	Nov 15	Wages	20.00	
63	Nov 20	Food	10.50		63	Nov 20	Food	10.50	
64	Nov 25	Medical	9.50		64	Nov 25	Medical	9.50	
65	Nov 30	Transport	11.50		65	Nov 30	Transport	11.50	
66	Dec 5	Wages	21.00		66	Dec 5	Wages	21.00	
67	Dec 10	Food	11.00		67	Dec 10	Food	11.00	
68	Dec 15	Medical	10.00		68	Dec 15	Medical	10.00	
69	Dec 20	Transport	12.00		69	Dec 20	Transport	12.00	
70	Dec 25	Wages	22.00		70	Dec 25	Wages	22.00	
71	Dec 30	Food	11.50		71	Dec 30	Food	11.50	
72	Jan 5	Medical	10.50		72	Jan 5	Medical	10.50	
73	Jan 10	Transport	12.50		73	Jan 10	Transport	12.50	
74	Jan 15	Wages	23.00		74	Jan 15	Wages	23.00	
75	Jan 20	Food	12.00		75	Jan 20	Food	12.00	
76	Jan 25	Medical	11.00		76	Jan 25	Medical	11.00	
77	Jan 30	Transport	13.00		77	Jan 30	Transport	13.00	
78	Feb 5	Wages	24.00		78	Feb 5	Wages	24.00	
79	Feb 10	Food	12.50		79	Feb 10	Food	12.50	
80	Feb 15	Medical	11.50		80	Feb 15	Medical	11.50	
81	Feb 20	Transport	13.50		81	Feb 20	Transport	13.50	
82	Feb 25	Wages	25.00		82	Feb 25	Wages	25.00	
83	Feb 28	Food	13.00		83	Feb 28	Food	13.00	
84	Mar 5	Medical	12.00		84	Mar 5	Medical	12.00	
85	Mar 10	Transport	14.00		85	Mar 10	Transport	14.00	
86	Mar 15	Wages	26.00		86	Mar 15	Wages	26.00	
87	Mar 20	Food	13.50		87	Mar 20	Food	13.50	
88	Mar 25	Medical	12.50		88	Mar 25	Medical	12.50	
89	Mar 30	Transport	14.50		89	Mar 30	Transport	14.50	
90	Apr 5	Wages	27.00		90	Apr 5	Wages	27.00	
91	Apr 10	Food	14.00		91	Apr 10	Food	14.00	
92	Apr 15	Medical	13.00		92	Apr 15	Medical	13.00	
93	Apr 20	Transport	15.00		93	Apr 20	Transport	15.00	
94	Apr 25	Wages	28.00		94	Apr 25	Wages	28.00	
95	Apr 30	Food	14.50		95	Apr 30	Food	14.50	
96	May 5	Medical	13.50		96	May 5	Medical	13.50	
97	May 10	Transport	15.50		97	May 10	Transport	15.50	
98	May 15	Wages	29.00		98	May 15	Wages	29.00	
99	May 20	Food	15.00		99	May 20	Food	15.00	
100	May 25	Medical	14.00		100	May 25	Medical	14.00	
101	May 30	Transport	16.00		101	May 30	Transport	16.00	
102	Jun 5	Wages	30.00		102	Jun 5	Wages	30.00	
103	Jun 10	Food	15.50		103	Jun 10	Food	15.50	
104	Jun 15	Medical	14.50		104	Jun 15	Medical	14.50	
105	Jun 20	Transport	16.50		105	Jun 20	Transport	16.50	
106	Jun 25	Wages	31.00		106	Jun 25	Wages	31.00	
107	Jun 30	Food	16.00		107	Jun 30	Food	16.00	
108	Jul 5	Medical	15.00		108	Jul 5	Medical	15.00	
109	Jul 10	Transport	17.00		109	Jul 10	Transport	17.00	
110	Jul 15	Wages	32.00		110	Jul 15	Wages	32.00	
111	Jul 20	Food	16.50		111	Jul 20	Food	16.50	
112	Jul 25	Medical	15.50		112	Jul 25	Medical	15.50	
113	Jul 30	Transport	17.50		113	Jul 30	Transport	17.50	
114	Aug 5	Wages	33.00		114	Aug 5	Wages	33.00	
115	Aug 10	Food	17.00		115	Aug 10	Food	17.00	
116	Aug 15	Medical	16.00		116	Aug 15	Medical	16.00	
117	Aug 20	Transport	18.00		117	Aug 20	Transport	18.00	
118	Aug 25	Wages	34.00		118	Aug 25	Wages	34.00	
119	Aug 30	Food	17.50		119	Aug 30	Food	17.50	
120	Sep 5	Medical	16.50		120	Sep 5	Medical	16.50	
121	Sep 10	Transport	18.50		121	Sep 10	Transport	18.50	
122	Sep 15	Wages	35.00		122	Sep 15	Wages	35.00	
123	Sep 20	Food	18.00		123	Sep 20	Food	18.00	
124	Sep 25	Medical	17.00		124	Sep 25	Medical	17.00	
125	Sep 30	Transport	19.00		125	Sep 30	Transport	19.00	
126	Oct 5	Wages	36.00		126	Oct 5	Wages	36.00	
127	Oct 10	Food	18.50		127	Oct 10	Food	18.50	
128	Oct 15	Medical	17.50		128	Oct 15	Medical	17.50	
129	Oct 20	Transport	19.50		129	Oct 20	Transport	19.50	
130	Oct 25	Wages	37.00		130	Oct 25	Wages	37.00	
131	Oct 30	Food	19.00		131	Oct 30	Food	19.00	
132	Nov 5	Medical	18.00		132	Nov 5	Medical	18.00	
133	Nov 10	Transport	20.00		133	Nov 10	Transport	20.00	
134	Nov 15	Wages	38.00		134	Nov 15	Wages	38.00	
135	Nov 20	Food	19.50		135	Nov 20	Food	19.50	
136	Nov 25	Medical	18.50		136	Nov 25	Medical	18.50	
137	Nov 30	Transport	20.50		137	Nov 30	Transport	20.50	
138	Dec 5	Wages	39.00		138	Dec 5	Wages	39.00	
139	Dec 10	Food	20.00		139	Dec 10	Food	20.00	
140	Dec 15	Medical	19.00		140	Dec 15	Medical	19.00	
141	Dec 20	Transport	21.00		141	Dec 20	Transport	21.00	
142	Dec 25	Wages	40.00		142	Dec 25	Wages	40.00	
143	Dec 30	Food	20.50		143	Dec 30	Food	20.50	
144	Jan 5	Medical	19.50		144	Jan 5	Medical	19.50	
145	Jan 10	Transport	21.50		145	Jan 10	Transport	21.50	
146	Jan 15	Wages	41.00		146	Jan 15	Wages	41.00	
147	Jan 20	Food	21.00		147	Jan 20	Food	21.00	
148	Jan 25	Medical	20.00		148	Jan 25	Medical	20.00	
149	Jan 30	Transport	22.00		149	Jan 30	Transport	22.00	
150	Feb 5	Wages	42.00		150	Feb 5	Wages	42.00	
151	Feb 10	Food	21.50		151	Feb 10	Food	21.50	
152	Feb 15	Medical	20.50		152	Feb 15	Medical	20.50	
153	Feb 20	Transport	22.50		153	Feb 20	Transport	22.50	
154	Feb 25	Wages	43.00		154	Feb 25	Wages	43.00	
155	Feb 28	Food	22.00		155	Feb 28	Food	22.00	
156	Mar 5	Medical	21.00		156	Mar 5	Medical	21.00	
157	Mar 10	Transport	23.00		157	Mar 10	Transport	23.00	
158	Mar 15	Wages	44.00		158	Mar 15	Wages	44.00	
159	Mar 20	Food	22.50		159	Mar 20	Food	22.50	
160	Mar 25	Medical	2						

FOLLOWING UP.

After medical inspection a period is allowed parents in which to get treatment, thereafter the School Nurse investigates the amount and nature of treatment which has been procured. This, of course, entails repeated visits to the homes of the affected children. The amount of stimulation parental solicitude requires, in any area, is surprising. Refusals are met with, and I think it would be well for the Committee to have a scheme whereby they would automatically consent to prosecution being substituted for fruitless pressure, in cases which, in the opinion of the School Medical Officer, suffer, in the meaning of the Children's Act, as a result of the parent's or guardian's refusal, or continued neglect, to secure treatment. One Education Authority, prosecuting under Sec. 12 of the Children's Act for failure of a parent to have his child's enlarged tonsils removed, has successfully appealed against the adverse decision of a local Bench, so that doubt as to the decision, however equitable the prosecution, need no longer obsess Committees.

The following up "promise" is one of the most vexatious features of medical inspection. Parents make promises which they so signally fail to fulfil that there can be little doubt that it was not their intention at any time to fulfil the promises. I have had the provocation of the oft-repeated and unfulfilled promises of a mother to have her daughter's enormous and long-standing enlarged tonsils removed (the defect being attended by deafness and frequent acute throat inflammation) further intensified by being asked to certify the child for employment in a spinning mill.

I find that being Certifying Factory Surgeon is a considerable handle in "following up." The School Nurse on her visits to houses informs parents that the child, unless treated, will not be certified for factory employment, and on my certification rounds I carry with me a list of all defective children found at the leaving

inspection, to which I refer before certifying or examining any child. If any child found defective, as a leaver, is presented without having obtained treatment, I refuse to certify, and in this way I have, even within a week, obtained not a few pairs of spectacles for children, and also other forms of treatment.

Re-inspection of all children found defective at medical inspection is the most important feature of following up. It is the measure of the efficacy of the treatment. Every child found defective who had not already left school was re-inspected either at school or, if absent, at the Council offices. Some were re-inspected in the mills where, as already said, they were rejected if untreated.

RESULTS AFTER FOLLOWING UP AND RE-INSPECTION.

The results after following up are given in the accompanying table.

It will be seen at once that although a considerable amount of treatment was obtained, yet the results on the whole are decidedly unsatisfactory.

Parents were notified concerning 275 defects found at routine medical inspection; 68% of these defects are known to have had treatment in some form, but that the form was unsatisfactory may be gathered from the percentage of cures, which was 39. The explanation of this is that many of the cases are taken to hospital where treatment cannot be obtained without waiting for a considerable time. Thus children with enlarged tonsils or adenoids are told that they will be sent for when an operation can be performed. It will be seen that of the 16 children taken to hospital half are still awaiting operation. Again parents who take their children to private doctors, on being informed that an operation is essential, in many cases shrink from either the fear of operation or the reasonable expense involved therein, and such cases remain unremedied. (Of 53 throat and nose cases, but 14 have been operated on.) One-fifth of the throat and nose cases have not obtained treatment in any form.

TREATMENT AND RESULTS OBTAINED, AS ASCERTAINED BY FOLLOWING UP AND RE-INSPECTION.

	Hospital.			Private Practitioner.			Home Treatment.	Not Treated.	Left.	Refused.	Total.	Known to have had treatment in some form.	Results at Re-inspection.							
	O.	T.	G.	O.	T.	G.							Cured.	%	Relieved.	%	Left.	%	Unchanged.	%
Defective Vision, including Squint...	...	5	26	...	2	9	...	16	12	...	70	60	37	52	...	12	17	21	30	
Enlarged Tonsils and Adenoids ...	9	7	...	5	17	...	...	11	1	3	53	71	11	20	4	4	7	34	64
Discharging Ears and Deafness ...	...	2	...	...	5	...	1	2	...	1	11	72	2	18	1	5	45	3	27
Inflamed Eyes ...	...	2	...	...	11	..	3	1	...	...	17	94	10	58	3	...	...	4	23
Malnutrition, Anaemia, and Debility	...	1	...	...	8	...	...	...	1	...	10	90	4	40	2	1	10	3	30
Impetigo and Other Skin Diseases..	...	2	...	...	15	...	8	...	...	...	25	100	20	80	1	4	16	...	...
Carious Teeth ...	...	...	...	5	4	...	...	24	6	1	40	22	5	12	...	6	15	29	72
Other Conditions ...	13	10	...	1	14	...	3	4	2	2	49	83	19	38	9	6	12	5	10	
	22	29	26	11	76	9	15	58	22	7	275	68	108	39	20	7	37	13	100	36

O—Operation.

T—Treatment.

G—Glasses.

Nearly one-fourth of the defective vision cases are still without treatment. This is a serious matter from an educational point of view, and I know there are many children in the schools outside the scope of routine examination who have such defective eyesight as to be unable to derive any benefit from the education which the State provides at considerable cost.

Carious teeth provide the least satisfactory feature in the consideration of results. Only the very worst cases of decayed teeth were notified,—cases in which it was apparent that the children's health either was affected or would be likely to be affected by the possession of but few sound teeth and many decayed teeth. Of the 40 cases notified only five had extractions performed. Four others were taken to dentists who refused to extract. The other 31 obtained no treatment of any kind. No notifications were sent where conservative dentistry only was necessary, as at ordinary medical inspection evidence of this necessity of filling cannot be more than superficially looked for. No conservative dentistry has been effected.

I was asked shortly after my appointment to make a report as to the necessity of a school clinic for treatment of defective children attending the schools in the district. I purposely refrained from any haste in the production of this report, as I wished to be in a position to advise the Committee of facts which were obtained over an extended period. These facts are plainly stated in the accompanying table, and the recent visit of the Medical Inspector of the Board of Education makes it apparent that the Board recognises fully the facts stated in the table, *i.e.*, that dentistry, vision correction and minor ailment treatment are needed, and that the need must be met out of education funds if the proceeds of education are to be commensurate with the cost.

Regarding minor ailments I would like to say that the serious loss of attendance occasioned by conjunctivitis and impetigo could be combated best by a school treatment clinic.

THE INSPECTION CLINIC.

The Inspection Clinic is conducted on six days of the week, from 9 a.m. for one hour; this time is on many days exceeded, as it is difficult to get parents to come up to time. The children who attend are sent by teachers, attendance officers, parents, and the school nurse and school medical officer.

Of the 1,738 inspections from May to December last year, 431 were at the direct instance of the attendance officers, and concerned the ability or inability to attend school on medical grounds, of 431 children.

It is the practice of the attendance officers now to have the opinion of the School Medical Officer concerning all children absent from school on medical grounds with the exception of the automatically excluded and re-admitted children in connection with the common infectious diseases.

No child excluded from school for Ringworm, Impetigo, Scabies, Ophthalmia, Conjunctivitis, Sore Throat and Tuberculosis is received back in school without a re-admission form from the School Medical Officer.

Each child sent by the attendance officer is accompanied by a form on which information regarding length of absence, reason of absence, is filled in by the attendance officer. Information and advice supplied by the School Medical Officer is added to the same form and returned to the attendance officers, and the form is filed and is available for Attendance Sub-Committees and for Court proceedings.

CLASSIFICATION OF CASES SEEN AT THE INSPECTION CLINIC.

Nature of Cases.				No. of Cases.		No. of Times Seen.
Conjunctivitis	...	...	...	114	...	312
Impetigo	...	...	...	106	...	282
Ringworm of Scalp	...	...	...	40	...	131
Pulmonary Tuberculosis	...	...	...	38	...	76
Eczema	...	...	...	15	...	37
Verminous Conditions	...	...	...	15	...	43
Sore Throat	...	...	...	11	...	31
Corneal Ulcers and Blepharitis	...	...	...	7	...	19
Heart Disease	...	...	...	5	...	6
Ringworm of Body	...	...	...	3	...	6
Septic Conditions	...	...	...	3	...	7
Discharging Ears	...	...	...	3	...	5
Scabies	...	...	...	3	...	5
Other Tuberculosis	...	...	...	2	...	12
Chest Conditions	...	...	...	2	...	4
Alopœcia	...	...	...	1	...	3
				<hr/>		<hr/>
				368	...	979
Miscellaneous Cases seen once only				759	...	759
				<hr/>		<hr/>
				1127	...	1738
				<hr/>		<hr/>

Of these 1127 Cases 431 were sent directly by
Attendance Officers.

A card system is in use at the Inspection Clinic. Each child is entered at the time of visit in a daily register and if the child is asked to return to the Clinic a card is made out with name and address, school, disease, and date of first visit. At each subsequent visit the date and condition are written on the card. Definite periods are assigned each child for the interval between visits. Thus in impetigo and ophthalmia the period is one week. In ringworm of the scalp it is two weeks, etc. It is thus very easy to keep every excluded child under supervision, and if attendances are not made the parents and attendance officers are communicated with. At each visit of excluded children the parent's form of exclusion is stamped to show attendance officers when visiting homes that the child has presented itself at the inspection clinic.

The accompanying table classifies the work accomplished at the Inspection Clinic. It will be observed that the affections with which the work was most concerned were conjunctivitis, impetigo, ringworm and tuberculosis.

The persistency which characterised some of the eye affections at once made the diagnosis of chronic conjunctivitis clear, but for a long time it was difficult to differentiate between cases of trachoma and follicular conjunctivitis. That there was a proportion of both affections is undoubted. Well developed granulations under the upper eyelid with isolated cases of pannus made the diagnosis of trachoma undoubted, but there were cases in which the inflammation was confined mainly to the lower eyelid, and in which granulations were abundant there.

Of simpler, non-purulent conjunctivitis there were not a few cases. The simpler nature of the affection was demonstrated by the shortness of exclusion from school.

It was clear from the outset that the predisposing cause of the chronic eye inflammations was unsanitary conditions. The great majority of all cases came from St. Augustine's and St.

Mary's Schools—schools in which it might be truly said that the sanitary condition of the buildings leaves something to be desired, and at which children from some of the most insanitary houses in the district attend. This predisposing cause made the difficulty of contending with the very appreciable loss of grant from exclusion of children a real one. It might be contended that the loss of grant was really due to the exciting cause and not the predisposing cause, but the answer to such an argument is that had the predisposing causes not obtained, the exciting causes would not have allowed the epidemic proportions which were in evidence.

The above statement applies no less to *impetigo contagiosa*, which was accountable for a very considerable loss of grant. This affection and conjunctivitis would appear to be endemic in Pendlebury, and exclusion from school attendance would not appear to lessen their incidence. The infectious cases presumably are in school for a day or two before the affection is recognised. Mean-time infection is spread. Moreover, one member of a family having contracted either malady, quickly infects the other members in overcrowded and insanitary houses and also conveys infection outside the family circle in uncontrolled freedom of movement.

FEEDING OF NECESSITOUS SCHOOL CHILDREN.

The children are chosen on the wage scale principle. If the wages exceed a rate of 10s. for father and mother and 2s. for each child, then no school child of such family is eligible for school meals provided under the Act. Thus a family of five school children who come from a home of which one guinea a week is income are ineligible to benefit from the Act as administered in Swinton and Pendlebury. Thus administered, I do not see that the Act affords relief to any but those who otherwise would be in actual starvation. I will presently show that the relief afforded actual starvation is quite inadequate. The diet scale is as follows ;—

Monday : Lentil Soup (lentils, ham shanks, other vegetables) and bread.

Tuesday and Thursday : Hot Pot (potatoes, onions, carrots, turnips, and shin beef).

Wednesday : Pea Soup (peas, marrow bones, vegetables) and bread.

Friday : Bread and jam and cocoa.

The meals are, with the exception of the Friday dinner, ample in quality and quantity. That of Friday is insufficient in quality. I have visited the children at meal times, and have seen them satisfied with an abundance of the meals provided.

About four months ago weekly weighing of the children taking the dinners was instituted. I have a register of the records. Only 13 of the children have been fed each week regularly since weighing was commenced. I give the weight record of the said 13 children :

		Commencing Weight in Kilogrammes.		Weight after 16 Weeks' Feeding.		Gain.		Loss.
Case	1	...	24.2	...	24.6	...	.4	...
Case	2	...	25.4	...	25.6	...	.2	...
Case	3	...	18.2	...	18.2	...		...
Case	4	...	15.6	...	15.6	...		...
Case	5	...	32.0	...	33.2	...	1.2	...
Case	6	...	22.6	...	22.4	...		0.2
Case	7	...	29.0	...	28.8	...		0.2
Case	8	...	24.0	...	23.4	...		0.6
Case	9	...	22.8	...	22.0	...		0.8
Case	10	...	35.4	...	36.6	...	1.2	...
Case	11	...	25.2	...	24.8	...		0.4
Case	12	...	22.2	...	21.8	...		0.4
Case	13	...	18.4	...	18.6	...	0.2	...
						3.2	...	2.6

It will be seen at once that six children have lost weight and five children have gained weight, and two have remained stationary in weight. It cannot be contended that this is a satisfactory result. The interpretation is simple. It is, that children who are starved at home do not make weight on one meal a day provided at school five days a week. I have physically examined each child who has lost weight, and there can be no doubt that the one physical defect present was that leanness which is associated with semi-starvation. I have had the mothers of the children to see me, and their story of the home life substantiates what I have said. If any benefit is to be derived from feeding school children from homes the economic circumstances of which are under the income which the Committee consider prohibitive for feeding purposes, one meal a day is insufficient. I contend I have proved that. These children need a breakfast as well as a dinner, and the provision of a breakfast would not, I think, exceed the sum derivable from the levy of $\frac{1}{2}$ d. rate.

HALF-TIMERS.

Thirteen boys and nine girls engaged half-time in spinning and weaving mills were examined as leavers. They were all of the age of 12. They compared favourably in height and weight with the children of 12 years of age who were not in half-time employment, and had a smaller percentage of defects, but the fact that the half-time children of 12 years of age are to a certain extent picked must not be lost sight of. They are rejected in the mill if physically unsuited. This rejection I myself as certifying surgeon effect. Then again they have to show high efficiency in school attendance before getting half-time exemption from school attendance. If they have in any way been physically incapacitated it is reasonable to assume that they will have been unable to make the necessary attendances. I do not think that the year which intervenes between the commencement of half-time employment and the commencement of whole time employment is a period long enough, especially with half-time employment, to say what are the physical

effects of the employment, but it stands to reason that the child who works in a spinning mill from 6 a.m. until noon is not in the most receptive state when attending school the same afternoon. This conclusion is not arrived at by logical argument alone; it is the conclusion arrived at by observation and the statement of teachers.

JUVENILE EMPLOYMENT.

Besides being School Medical Officer for Swinton and Pendlebury, I am Certifying Factory Surgeon for Swinton and Pendlebury and Worsley.

Between April 21st and December 21st, 1913, 46 boys and 62 girls were presented to me for half-time employment. There are 70 half-timers in Swinton and Pendlebury, so the proportion belonging to Worsley can be easily assigned.

Of the half-timers one boy was rejected for ringworm and one girl was rejected for being verminous.

Between 13 and 14 years of age the number presented during the same period was 163 boys and 227 girls.

Of these, four were rejected for being verminous, two for defective vision, two for adenoids and deafness, and one for cataract.

Between 14 and 16 years of age, 72 boys and 171 girls were presented.

Of these, six were rejected for being verminous and one was rejected for otorrhœa.

The verminous cases, in the majority of cases, were certified after having been cleansed. Both defective vision cases obtained glasses and were then certified.

The cataract case was rejected for any employment in a textile factory, but obtained employment in a laundry as a collar brusher.

The ringworm case is still infectious.

Both adenoid and deafness cases are still uncertified.

It is only within the last few months that parents have realised that the post of School Medical Officer and the Certifying Factory Surgeon are combined in one appointment. The result is that if a child has been notified from school as suffering from some physical defect they begin to realise that it is useless to present the child at the factory for certification without remedial measures having been obtained.

There does not seem to be much need of a juvenile employment care committee in Swinton and Pendlebury. It is the almost inevitable fate of working class children in this district to go into the mill or the pit, and if they are unfit for the former the School Medical Officer in his capacity as Certifying Factory Surgeon is in a favourable position to act as juvenile employment advisor.



